

# AMERICAN AGRICULTURIST.



*Agriculture is the most healthy, the most useful, and the most noble employment of man.*—WASHINGTON.

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## THE TRAVELLER.—No. 6.

ONE of the most improving planters in the vicinity of Tallahassee is Col. Robert W. Williams. His plantation, on Lake Iamonee, twelve miles north of the town, is successfully side-hill ditched, and that is more than can be said of many others. He has more improved plows and other tools, and saves more manure, oyster shells, and bones, than any other man I know of in Florida. He is laughed at by his neighbors, as a theorist, experimental book farmer, &c.; but they are glad enough to follow him in everything that is successful. It is easy now to procure good plows of the merchants, or other agricultural implements from your New-York Agricultural Warehouse; and yet, few are aware how much they are indebted to Col. Williams for what he has done in the way of introducing such things into Florida.

There are many other persons and things which I shall notice hereafter, in this "land of promise." At present, being a traveller, I must travel on, merely giving the very pleasant town and people of Quincy a passing remark. The location is about as handsome as could be desired; the surface gently undulating, sandy-loam soil, and being surrounded by deep hollows, requires no artificial grading. These hollows abound in springs and excellent sites for the hydraulic ram. One of the staple products of this, Gadsden county, is Spanish tobacco. It is grown in several places in Florida, principally from Cuba seed, and is in high repute among cigar makers for wrappers; it is more handsomely spotted than the same article grown in Cuba. The first quality is grown exclusively upon new ground, the first year after clearing off the timber; in fact, it will not spot upon old ground, and besides, the leaf grows thicker, and not so suitable for wrappers. Not more than one acre can be planted to the hand, such is the immense labor of cultivating this crop, principally owing to the unceasing task of keeping it clear from worms. An average crop is 500 pounds, and the average price about 22 cents a pound. The second year's crop is heavier but less valuable, while the third year will not pay, on account of the great labor of keeping it free of grass. One gentleman told me he had made \$600 a year, to the hand, out of his tobacco and other crops, as the tobacco does not prevent them from raising corn, and part of a crop of cotton in connection with it. The crop is mostly sent to New Orleans, for sale.

*February 22d.*—When I left Quincy, the oak trees were putting on spring foliage, and the

wild jasmine filled the roads with fragrance from its beautiful flowers of gold; farmers were planting corn, and the few who ever think of such small matters, were busy putting garden seeds in the already warm earth. If Quincy could be easily approached, and had only a decently comfortable hotel, it would become a great resort for invalids during winter. From there to Chattahoochee, 22 miles, the road I found passing nearly all the way through pine woods upon a pretty level ridge, until near the river, where there was an awful hill, down which I risked my neck in a crazy old coach, and dark night, just to get an idea of the elevation of the table land behind. If the traveller expects to find the town of Chattahoochee, he will be slightly disappointed. It consists of a tavern, store, warehouse, and such other out buildings as can be crowded upon a little mound of about a quarter of an acre rising out of the overflowed swamp, serving for a ferry and steamboat landing for a great extent of country. A delightful summer residence it must be for the full enjoyment of hunting alligators, fighting mosquitos, and shaking off the ague.

It was my intention to visit Mariana, and return here to take a boat up to Columbus; but finding some ladies and gentlemen who had been waiting five days, I determined to join them upon the very first, which luckily arrived a few hours after I did. As I had no desire to risk so long a waiting upon such circumscribed limits, I hope my friends in Mariana will accept this as my excuse for not keeping my engagements.

The cotton lands upon the lower part of the Chattahoochee River are broad and low, and subject to inundation every year. A few miles above Flint River, on the west branch, there is one small, rocky point which is almost the only one above high water to be seen in a whole day's sailing.

*February 23d* was like a balmy May day; the early trees along the river as green as summer, while azalias and jasmine flowers lent a delightful fragrance to the air as we wound along the rich alluvial shores, a great portion of which are still in forest; for, notwithstanding the temptation of the rich harvests this soil yields, with little preparation and cultivation, the miasma is as abundant as any other product.

We left the low bottoms at close of day, and during the night, passed Fort Gaines and Eufaula, where the clay bank rises 160 feet, a considerable portion of it perpendicular from the water. Warehouses with unboarded sides, ten or twelve

stories high [?] built in the side of these bluffs, present a singular appearance, when lighted up by the glare of half a dozen brilliant light-wood torches that are flashing a glad welcome to the approaching steamer, in the hands of that ever-joyous set of beings, the negroes, whose happy and contented faces and cheerful glee, always adds a charm to a night landing upon a southern or western river.

During all the 24th, we were sailing between some of the finest plantations upon this rich river. The Oswichee Bend, formerly owned by General Hamilton, has lately been purchased, with some 280 servants, by Mr. Wright, of Cheraw, South Carolina. The price, \$140,000, is considered low. The last crop sold for \$22,000. I believe there are about 3,000 acres of land, including the hills, though a thousand acres, more or less, is not considered in sales of this kind; the number of servants and number of cotton bales produced, is the criterion of value.

*Average Crops upon Bottom Lands.*—Judge Mitchell, of Columbus, whose plantation is on creek bottom land, 30 miles from that town, on the Alabama side, told me he averaged from 1844 to 1850, 2,100 pounds, (five and a quarter bales,) to the hand, making at the same time a full supply of corn and pork. As he is considered a first-rate planter, this may be taken as a full average yield of the bottom lands of this river for a series of years.

*Chattahoochee Cotton Lands.*—These are ranked among the best in the United States. General Abercrombie is one of the oldest planters on the Alabama side below Columbus, having settled there in 1835; his crops may be taken as a pretty fair specimen of the capability of productiveness under ordinary cultivation. He works, now, 40 hands all told; say 30 full ones, and plants 300 acres of cotton, and 250 of corn, besides considerable quantity of oats, some wheat, potatoes, turnips, rice &c., and makes all his own meat, and a little to spare, and sells corn. His cotton has averaged, per year, 1,000 pounds in the seed, to the acre, and five bales to the hand, and six cents a pound for price. He plants corn the middle of March, in the bottom of water furrows, between four-foot beds; first running a subsoil plow. Plants cotton middle of April, four to six feet between rows. Never burns cotton and corn stalks, nor waste manure, although the land he cultivates is the very finest kind of river bottom. Says he keeps too many cattle, and is convinced that he might buy more pork with the corn consumed than it makes.

*Columbus.*—What traveller has ever visited this thriving, go-ahead town without feeling proud of the enterprise of his countrymen? I could not say all I might of this place, in a whole number of this paper. Many wealthy citizens of Columbus have dwellings out upon the hills near town, where they enjoy the fresh air, amid beautiful grounds, shade trees, shrubbery, and pleasant gardens. Among these, are Col. Chamber's, Dr. Wildmon's, Messrs. Hurt's Flournoy's, Woolfolk's, Mitchell's, and others' of our friends and subscribers.

Mr. Charles A. Peabody, one of the editors of "The Soil of the South," the most successful strawberry culturist in the world, lives on the Alabama side about five miles from town. Several very large cotton and other mills, occupy a small portion of the immense water power of this place.

Columbus is 350 miles above Apalachicola, its natural seaport, and 200 above Chattahoochee, a passage of two days and one night. Fare, on a good boat, \$7.

*March 6th.*—To Barnesville, 70 miles—\$7 by stage—roads such as every traveller remembers with the same feelings the boy did the whipping, awful while it lasted—very glad its over with. Here I took good cars to Atlanta, 62 miles, upon one of the excellent railroads which abound in Georgia.

Atlanta is a sort of Jonah's-gourd city, which has grown up entirely within five years. It is at the northern terminus of the Central Railroad from Macon, 101 miles, the western terminus of the Georgia Railroad, from Augusta, 168 miles, the southern terminus of the State Railroad, from Chattanooga 138 miles, and the eastern terminus of a new road not yet quite completed to West Point to join the Alabama road. It is already a place of note, but will be more so, for it holds a few men of the right sort to make any new town go ahead rapidly. One of the most prominent of these, is R. Peters, who was educated for and practised civil engineering many years, but is now one of the most improving farmers in Georgia. He has done more than any other man in this part of the state to introduce all kinds of improved stock. His favorite cattle, after a fair trial of several breeds, are the beautiful Devons. How much a new country is indebted to such men, is never fully appreciated. Mr. P. and his partners have built a very superior steam flouring mill here, which is not only a convenience, but an ornament to the place. Unfortunately, the wheat crop of '49 and '50 were so cut off they have been grinding

wheat from New York for the supply of the country.

Near Atlanta, resides Mr. J. V. Jones, who has lately become somewhat celebrated as the grower of a remarkably fine quality of upland cotton of a very long staple, upon his plantation, in Burke county. It is known as Jethro cotton, and is well worthy the attention of all planters. This part of Georgia is noted for the salubriousness of its climate. The soil around Atlanta is not first quality, except for fruit. Apples are abundant. Mr. Peters is experimenting, which will be the best grass to cultivate, as that is only lacking to make it one of the very best wool-growing regions.

Stone Mountain is an object, which attracts the attention of all travellers, a few miles after leaving Atlanta, on the road to Augusta. It is an immense mass of naked granite, standing up out of the comparative level around, like the great pyramids of Egypt. It is a land mark that will endure forever. If it had been a lime rock, it would have been more valuable to the agriculturist; for all the lands along this road would be wonderfully benefitted by an application of calcareous matter. In sight of this great natural curiosity let the traveller rest.

SOLON ROBINSON.

#### PORK—BACON—HAM.—NO. 5.

No animal yields so little mere offal as the pig, every part being made useful—feet, head, and shanks are all admired when pickled or made into "brawn." The poor man makes a comfortable meal of the pluck and part of the caul; the large intestines and stomach are sold under the name of "chitterlings;" the small intestines envelope sausage meat; sausage meat itself is formed from the scraps; black puddings are made from its blood, the bristles are appropriated by the brushmaker, every part is turned to account, so much so, that we cannot be surprised at the hog being so long continued a favorite at the farm house, particularly when we take into consideration the valuable property which his flesh possesses of being easily preserved for future occasions by means of salt.

In noticing the curing of bacon and pork, it is barely requisite to mention the curing of pork for the navy, the cutting up of which requires some practice, as every piece ought to weigh as nearly as possible alike, with an equal amount of bone. When cut up, it is thrown into large tubs containing a preparation of strong pickle, formed of salt and saltpetre; when cured, it is put into barrels, the bottom of the cask being cov-

ered with a layer of bay salt, then a layer of pork, another layer of salt, and so on alternately until the cask is nearly filled; then a layer of salt is laid on the top, and the cask headed up. The fresh pickle out of which the pork has been taken is then saturated with salt and poured through a hole left in the head of the cask for the purpose; when the cask is full, the hole is plugged up and the cask sent to market. Porkers cured for the home market, and usually known in the metropolis as barrelled "Berwick pork," is cured by being cut up into pieces and salted in tubs, having no other brine than that formed by itself in pickling. It is, when cured, taken out, packed in barrels along with fresh, strong pickle, and sent to market. A large quantity of the Berwick pork, sold in London, comes from the west of Ireland. For home use, pickled pork may be made, using a little sugar in addition to the salt, by which means less of the latter may be used. By this mode, the pork is not quite so salt; as, however, pickled pork is always preferred when made from pigs of moderate size, it is better to make the same as wanted, and not to keep it more than a month or six weeks; for prepare it in whatever way that can be devised, the flesh of young pigs will contract very much in the pot, if long cured, and in cooking, care should be taken not to over-boil it, otherwise it will also contract.

All sorts of recipes have been given for curing ham and bacon, some representing the mode of one country, some of another, overlooking the fact that almost every country or county adopts varied means, and do not confine themselves to any particular rule. If half a dozen farm houses in Westmoreland and Cumberland, who practise curing bacon on an extensive scale, be asked for their recipes, three or four different ones will be given; in fact, the mode of curing is most empirical, every curer adopting a formula of his own. If any book treating on swine and curing bacon is taken up, it will be invariably found that sugar or molasses enter into the reputed recipes of most of the celebrated districts. Now, the writer knows from actual experience, and from having been witness to the curing of bacon and hams in the west of England, Cumberland, Westmoreland, and Ireland, in the latter country where both York hams and West-of-England bacon is made up for the English market, and sold as such in England, (one curer of York hams in Ireland sending almost the whole of his make to Hull and York,) that no sugar nor molasses enters into the process of curing where the business



is carried on to any extent. In Cumberland and Westmoreland, it is customary, when the hams are sufficiently cured, to mix up a species of pomatum formed of lard or fat, black pepper, and sugar, and rub this over the bottom of the ham, but more particularly around, and over the end of the bone, filling the crevices well up with this substance; the principal effect of which is that it excludes the air, and consequently diminishes the chance of decay from ordinary causes, and the pepper decidedly prevents the fly converting it into a nest. With careful persons, the ribs, bony parts, and joints in bacon are treated in a similar manner; the sugar and pepper have also the effect of giving the ham and lean parts of the bacon so treated, an additional fine flavor. The only place where I have known sugar much used in curing bacon is in some parts of Essex, where I have tasted it quite sweet with sugar. The fine flavor of the Westmoreland and Cumberland hams is principally due to the fact of their being fed on oat meal and buttermilk, and not to the mode of curing.

Another important fact is, that, whilst firm, well-fed hogs absorb less salt than ill-fed animals; in fact, though as much salt is used with the former when perfectly cured will be by no means so salt as the latter, although like means are used in each case, and continued in pickle or salt a like length of time, and the reason is obvious from natural causes. There is not much fear of well-fed, firm hogs becoming over salt in curing, unless great excess of salt and saltpetre are used for the purpose, or kept preposterously long in salt. In whatever form the flesh of hogs is intended to be disposed of, it is requisite that food should be withheld from them for at least 16 or 24 hours prior to their being slaughtered; and if they have previously been driven, they ought to have a rest of three or four days before being killed; for if killed when in a nervously excited state, or incipient fever, arising from over driving or hot weather, the meat will only with difficulty "take the salt."

The state of the weather is a matter of great importance in curing bacon, warm and very moist weather being extremely prejudicial. Hot weather is not so injurious as is generally imagined, provided, the atmosphere is dry. As, however, the atmosphere is generally charged with moisture in proportion to its high temperature, the hurtful effect which frequently follows curing during the summer season is attributed to heat instead of the true cause, namely,

excess of moisture in the atmosphere, the baneful effect of which is heightened by its higher temperature, to which may be added the feverish condition of the animal at such seasons; if within the curer's power, his operations ought to be regulated rather by the hygrometer than by the thermometer. This is, however, difficult to accomplish, as hogs should fast 16 hours before being slaughtered, after which, they require to be hung up to cool 16 or 20 more, at least 36 hours must elapse before the sides are fit for the curer. In our variable climate, many changes may occur within that period. Severe frosty weather is not otherwise unfavorable to curing bacon than that which arises from the circumstance that it will not "take the salt" at all, but remains quite fresh, until a thaw comes on, when it takes the salt rapidly.—*Jour. Royal Ag. Soc.*

#### GOTHS AND VANDALS vs. SHADE TREES.

SOME simple readers of history suppose this class of people only existed in Europe; that they never overrun America as they did Rome, carrying the besom of destruction in their front rank wherever they march, and leaving their foot prints of fire, to show they have performed their office faithfully, of cutting down and committing to the flames every fine old tree of age and beauty they can lay their poisonous fangs upon.

I have seen within a few weeks past, in the vicinity of a great commercial town, the stumps of a hundred noble old roadside oaks that had just been cut down for no other object than the fuel, unless it was the gratification of barbaric pleasure to the Goth who ordered their destruction. I have also just been reading an article in the "Western Horticultural Review," published at Cincinnati, which designates this as the age of destruction, while speaking of the wanton wickedness of the way the Goths in the vicinity of that city are sweeping off all the glorious old trees that have beautified and adorned the hills which surround that great town, and which afforded me such cooling shades in days of Auld Lang Syne, where I used to recline with book or pencil in hand, looking down upon the busy hum below. No wonder, the writer alluded to, calls it the age of destruction, when he looks out upon those old hills during the burning days of summer, and sees them stripped of their ancient oaks by a spirit of Vandalism, that would blot out every line of beauty from the face of the earth for a little immediate gain. It was such a spirit that doomed to de-

struction a few months ago, one of the oldest and most beautiful spreading trees that ever lent its cooling shade to a lovely nook by the seaside, because, as the owner said, "a down-east chap offered \$15 for the confounded old thing, and I thought 'twould give us a better view, and so I let him cut it."

'Twas a noble old oak spreading wide by the sea,  
Where the breezes came cooling and fresh o'er the lea,  
While the dark waving foliage gave strength to the shade,  
Where a thousand deep vows Indian lovers have made;  
For the noble old oak spreading wide to the breeze,  
Like a vet'ran hath wintered long ages 'mong trees,  
And hath witnessed the fading and passing away,  
Of a nation of people God doomed to decay,  
While destroying the oaks that o'ershaded the lawn  
Comes a nation more ruthless than the red one that's gone.

Ruthless indeed—a perfect barbarian—who for the value of \$15, would cut down such a wide-spreading and delightful shade tree, that might have stood another century, and during these hot July days, would afford such a delightful retreat from the brick walls that sear and scorch me as I write this denunciation of the Goths and Vandals of America. SOLOX.

#### EXPERIMENTS WITH FRESH AND COMPOST MANURES.

LAST year, I applied to two pieces of land compost and fresh manures from the sheep yards in proportion of six of the former to seven of the latter, and planted each with Indian corn. The culture of both was similar, and that to which the compost manure was applied, produced full one fourth the most to the acre. The piece which gave the smallest return, before manuring, was considered to be in a higher state of cultivation. [What was the compost?—Eps.]

After placing the increased quantity of manures with the evident increase of the crop, against the expense of composting, I concluded to make another trial of composting this season, and have again applied it to the corn crop. The query now is, Which will produce the most lasting effect, the fresh or the compost manure? The produce of future years may turn the scale.

Salem, N. Y., June, 1851.

S. R. GRAY.

#### CHEMISTRY OF MILK.—No. 2.

I HAVE shown in my first number what the normal composition of milk is, and how it differs in different animals. It will be observed that there are considerable differences in the proportions of its elements in different species of animals; still, the elements are the same. The milk of carnivorous animals, or the flesh eaters, is the richest, and that of the ass the poorest, or rather most watery. That of the human female is also poor, both as to casein and butter,

but is rich in sugar. The milk of the goat does not differ essentially from that of the human female. Milk, it will be seen, contains three important elements—butter, cheese, or casein, and sugar. But these elements differ in their proportions as well as in the amount of milk given in different individuals, even while in health, and while fed upon the same kind of food; which is agreeable to experience. This, however, is not only true, but it is found to be true also, that the same individual gives more or less milk according to the state of her health and the character of the food with which she is supplied.

To determine the extent of these variations, I fed a small Dutch cow with different kinds of food during two or three months of the fall and winter of 1850. She was five years old, and her live weight, in November, while feeding upon grass, was 890 pounds. Her calf, which was then seven months old, weighed 348 pounds. The cow, on being put up to hay, ate from 21 to 27 pounds per day, of good hay. The average amount of hay per day, for one week, in December, was about 22 pounds, she having consumed 155 pounds. The water drank during the same period, amounted to 238 pounds, 12 ounces, or a little over 42 pounds per day. The solid excrements weighed 399 pounds, 8 ounces, or a little over 44 pounds per day. Her calf was supplied with the same kind of rations and ate, during the same period, 85 pounds of hay, or about 12 pounds per day, and drank 120 pounds, 12 ounces of water, or about 17 pounds per day, and made 144 pounds, 12 ounces of solid excrement, which is equivalent to 20 pounds per day.

A large horse consumes 31 pounds of hay per day. The weighed solid excrement amounts to 82 pounds, 8 ounces for the same period. A large proportion is water of course, and it seems to follow that an animal fed upon dry hay requires sufficient water to supply what the grass has lost in drying, in being changed from grass to hay.

To prosecute successfully a series of experiments upon the value of different kinds of food for the production of milk, it is necessary that the cow should be gentle and composed. One which is restless and of a nervous temperament will be impatient under confinement and give uncertain and unsteady results; or one which is naturally wild will be a bad subject, and her milk will vary not only in amount but in quality, also; trivial circumstances will cause results which will vitiate our conclusions. It is well known to physicians that the quality of the

milk of our own species is remarkably changed by circumstances. Moral considerations are especially operative; thus fear, anger, or a sudden fright has changed the character of the secretion to that extent, that death has followed from its use; or the infant has died from its effects in a few moments. The cow possessed the requisite qualities to fit her for the experiments I had in view. She is docile and gentle, easily milked, though not at all remarkable for the quantity she gives, yet its quality is remarkably good for a common cow. I think, too, that her system feels at once the influence of food, and that it is not lost in unproductive matters, but that it is expended in keeping it warm, and supplying nutriment to a system which does not waste itself excessively in an activity of those organs which are immediately concerned in producing excrementitious matters. Physiologists do not all agree, however, in regard to the effects of food in producing milk. Boussingault maintains that it is not essentially affected by the kind of food upon which the animal subsists, provided each kind of food is furnished in equivalent proportions; or which is about the same thing, provided the poorness of the food is made up in quantity.

The experiments of Professor Thompson, however, do not seem to support this view; and my own experiments corroborate those of Thompson. This view is also that which we should naturally adopt. The milk being derived from the food, must, it would appear, be influenced by it, both in quality and quantity. Roots and tubers, if fed by themselves, will rarely agree with the subject; and although an exact equivalent of roots and hay may be fed to the cow, yet the effects upon the secretion will be quite different. Milk is not a substance which is created, but rather one which is compounded of pre-existing elements. If there is a deficiency of one element in the food, as casein, for instance, we may infer with every probability of truth, that the secretion will be deficient in that element. Some kinds of food will make more cheese than others; some pasture lands of this state, all things being equal, will make more and better butter than others; yet it should not be forgotten that the room in which the milk is kept, will greatly influence the quality of the butter. But there is undoubtedly a limit to the influence of food upon the quantity and quality of milk. This limit is determined by the gland, the organ of secretion. The capability of the gland is constitutional, its capacity is determined by growth, or devel-

opment. It is an individual organ and is gauged, as it were, by constitutional peculiarities, and any increase of food beyond a certain amount cannot furnish a proportional increase of milk by atoms of increment. An attempt to override a constitutional law will not be successful, and perhaps not perfectly safe. The object which the farmer should have in view, is, to keep the animal up to her constitutional capacity.

E. EMMONS.

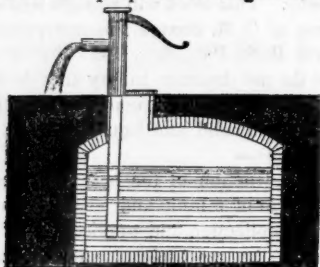
#### LIQUID MANURES.

WE are permitted to copy into the *Agriculturist*, the following valuable article on the subject of liquid manures, from the "American Muck Book;" treating of the nature, properties, sources, history, and operations of all the principal fertilisers and manures in common use, with specific directions for their preparation, preservation, and application to the soil and to crops; drawn from authentic sources, actual experience, and personal observation, as combined with the leading principles of practical and scientific agriculture. Illustrated with engravings. By D. J. Browne. This work will be soon issued from the press of C. M. Saxton, the enterprising Agricultural Book Publisher, 152 Fulton street, and we do not hesitate to say that it will be found the most full and complete treatise on manures, both solid and liquid, ever yet given to the public:—

The construction of the best and most convenient form of a tank, and a suitable apparatus for the collection and application of liquid manure, in the most cleanly and economical manner, is a subject of great utility, and one which has more or less occupied the attention of the most eminent agriculturists in various ages, and in all civilised countries of the globe.

The chief faults in the arrangements heretofore made for the purpose of collecting liquid manure, appear to have been that, the tanks, in some instances, received the urine alone, while the drainings of the barn yard and manure heaps were allowed to escape; or that they formed a receptacle for the rain water from the adjoining buildings, as well as in the urine, by which the liquid manure was much diluted, and consequently an increased expense in applying it; while, in other instances, the compost heap was at too great a distance from the tank, and hence, inconvenience was experienced in impregnating the compost when necessary. A mode by which these disadvantages would be obviated, and what appears to be an efficient system of collecting the drainage from the stables, farm yard, manure heaps, &c., is as follows:—

First, let a site be fixed upon for the manure tank, on the northerly side, if convenient, and behind the buildings of the yard; the tank being made of bricks, laid in cement or hydraulic mortar, and covered over, as indicated by fig. 48. A scuttle, or "man hole," should be constructed in the top, to allow a person to enter, to clear out the sediment which is liable to collect. The size should be regulated by the stock usually kept in the stables or sheds. Into this tank, all the urine from the stables, stalls, &c., should be collected, by means of drains communicating with each, as well as with the barn yard, which should be made a little concave in its bed, so that no portion of the liquid manure may be allowed to escape. A channel should be made around the compost heap, which should be close by, so that the drainage from it may be collected in the tank. All the farm buildings should have gutters or spouts, which should be so arranged that the water running from them may be conveyed away by a drain, or collected in cisterns for the purposes of irrigation, diluting

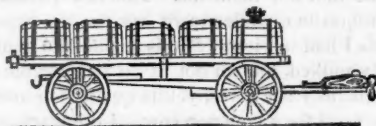


TANK.—FIG. 48.

the urine, or for domestic use. Lastly, let there be a pump fixed in the tank, by which its contents can at any time be transferred to a liquid-manure cart, or discharged on the compost heap, by the use of a hose.

By an arrangement like the foregoing, all the urine from the stables or stalls, and most of the wash from the dung heaps and the yards would be effectually collected, which might either be allowed to ferment spontaneously, the ammonia generated being converted into a sulphate, from time to time, by the addition of sulphuric acid, gypsum, or copperas, (sulphate of iron,) or it may be diluted with water, by which means much of the ammonia would be retained in solution as a carbonate—the former being the most effectual mode of securing the ammonia in the liquid. If nothing is used to fix the ammonia, it would be advisable to have the tank divided in the middle, allowing the urine or drainings to accumulate, diluted with three times its bulk

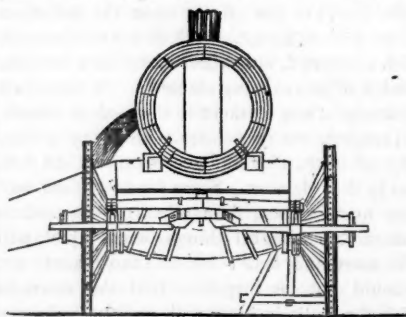
of water, until one division is full; this should be allowed to ferment for six weeks, when it will be fit to apply to the land as a top-dressing; the water used to dilute it retaining in solution most of the ammonia generated by the decomposition of the urea. If this arrangement be



LIQUID-MANURE CART.—FIG. 49.

adopted, it will be necessary that the drains should be made to communicate with either division of the tank, at pleasure; this may be effected by making the main drain divide into two branches near the partition in the tank, with a sluice placed in each branch of the drain leading to the separate divisions, so that the liquid may be discharged into either division; the pump, also, should have a moveable pipe, or should be moveable itself, so that either division of the tank may be pumped out at will.

In applying this manure, where the soil is light and not deficient in organic matter, loam, or mould, it would be advisable to administer it in a liquid form; but where the land is stiff and clayey, its application in the form of a compost will be found most serviceable, as it renders the soil lighter, more porous, and of easy cultivation. To the farmer possessing light soils, liquid manure from the tank, with the ammonia properly converted into a sulphate by the use of gypsum or sulphuric acid, will be found of great value. It may be applied to the land with a liquid-manure cart or a hand tub,

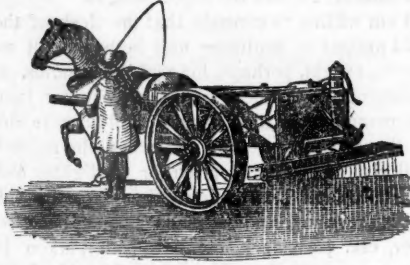


LIQUID-MANURE CART.—FIG. 50.

denoted by the accompanying cuts, just before the last plowing for the seed, or as a top-dressing for the young crops; particularly, when they are looking yellow and sickly; but let this important fact in regard to the application of liquid manures, always be borne in mind: That it is

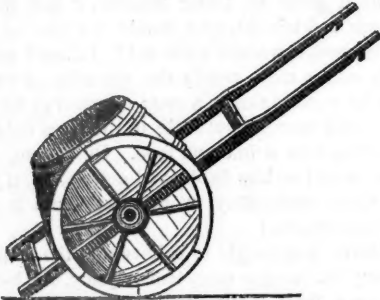


a waste to give it to plants before the formation of their secondary leaves, which is true in all cases. If applied at other periods, it will have some effect, but not so much. When applied directly to the plants, it is preferable to use it in showery weather; for let it always be remembered, that, during warm and dry weather, plants ab-



LIQUID-MANURE CART.—FIG. 51.

sorb fluids faster than when it is cool and dull, and that they perspire most in a dry, warm atmosphere. If the supply at the roots, therefore, is not kept up, then they become deteriorated in quality, and the produce is considerably lessened. The practice of pouring manure water immediately around the stem of a plant should be avoided, for two reasons; first, the roots, which absorb most, are in or approaching the centres of the spaces between the drills or rows; therefore, to be benefitted by it, the liquid should be distributed there. Another very important matter, common in vegetable culture, should not be lost sight of; that is, by applying the liquid in a limited circle around the plants, individually, as the roots have less inducement to travel



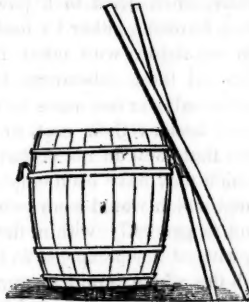
LIQUID-MANURE HAND CART.—FIG. 52.

in search of food; hence, they will be fewer in number. But if their food be placed at a greater, yet a reasonable distance from them, they will seek it out by instinct, as it were, fresh roots will be emitted, and they will have a much larger pasture to feed in.

When the liquid manure is to be used for watering the plants, a portion of it is pumped

out of the tank into casks, fixed on watering carts, denoted by fig. 49 and fig. 50; and then diluted with 5 or 6 times its bulk of water, and allowed to flow gently over the surface of the land between the plants, either by letting it run, when clear, through a tube perforated with holes, or upon a plank, when thick or turbid.

A portable liquid-manure cart has lately been constructed in England, denoted by fig. 51. It is made of iron plates, securely cemented and bolted together, and contains 200 gallons. It is mounted on wheels, four feet, ten inches high, with a new pattern half-round tire, four and a half inches wide. The tank body is fitted with a brass outlet valve, acted upon with an iron-lever rod, with which the driver opens and closes the valve whilst walking by the side of the horse. The pendulum-spreading apparatus, with regulating slide front, is adapted to



LIQUID-MANURE TUB.—FIG. 53.

water uneven land six feet broadcast. A partition, running lengthwise the inside of the tank, prevents the surge and overflow of its contents when upon rough land or bad roads. A simple contrivance, also, consisting of a box trough, and four flexible India-rubber tubes, is made to water four rows or ridges of turnips any required width at a time; two lads, with a handle in each hand, guide the delivering tubes in applying the liquid manure, guano water, dissolved bones, bleacher's ley, soap suds, diluted night soil, &c.

Meadows just mown, or fields sown with grain, may also be thus watered, as the vegetative force, imparted by this liquid manure, although of short duration, may have a great influence; for, once covered with green young plants, the ground is protected from drought; and, moreover, the plants themselves, by this means, rapidly acquire the necessary strength to resist various adverse influences, and to draw from the soil and atmosphere their quota of nourishment.

Another mode of spreading this manure, as has long been practised in Flanders, is, to take

it from the tank without diluting, convey it to the fields in casks, and pour it into a tub, fig. 53, from which it is made to flow over the ground; or it is distributed directly from the tank in a hand cart, denoted by fig. 52.

It is a question which has not been satisfactorily determined, whether means may not yet be devised of *completely, easily, and cheaply* separating the fertilising ingredients of urine and tank stuffs from the water in which they are dissolved. It is well known that alum, green vitriol, (sulphate of iron,) Epsom salts, (sulphate of magnesia,) and the sulphate of zinc, when mixed with fermenting urine or tank stuff, cause a precipitate to fall to the bottom, more or less dense, which will contain the phosphates and a portion of the other saline, and even of the organic constituents of the liquid. This precipitate, therefore, when dried to a powder, may be used as a fertiliser, either by itself, or what is better, in admixture with other fermenting manure; but all these substances leave most of the valuable salts in the water behind them, and, therefore, besides their cost, are open to the objection that they do not perform the purposes for which they have been employed.

The method which would seem to be the most rational, and is generally within the reach of the farmer, without much expense in the outlay, is, to absorb the whole liquid manure by partially-dried peat or swamp or pond muck, and thus add to its bulk, the fertilising matter contained in it. A method which has been extensively adopted both in Ireland and Scotland, is, to use the peat in a half-charred state, instead of using it raw. In localities where peat does not abound, charred saw dust, tan bark, apple pomace, or bagasse may be substituted with equally good effects. The waters of barn yards, common sewers, of gas houses, bone boilers, glue makers, bleacheries, flannel manufactories, &c., &c., may all be applied with the forenamed apparatus, or they may be absorbed by peat, &c., as recommended above.

#### FATTENING ANIMALS IN CONFINEMENT.

I PERCEIVE by the May number of your paper that you have seen fit to publish an extract from a letter of mine to a venerable friend, in which I mentioned an experiment in feeding oxen confined in the stalls. Although it was not intended for publication, yet, on account of the remarks it elicited upon the subject, I was glad you deigned to notice the communication.

I do not now intend to raise the tomahawk for contest, but with the calumet in hand, to say

that I cannot discover wherein said neighbors were right in any one particular. The cattle did not sicken, but fatten. Whether they would have fattened better in the open air, was not tried, and is not known; and if I "get more weight of fat, flesh, and manure from the food consumed," I attain the object sought.

I am willing to concede that the flesh of the wild animal is healthier and better in all respects, except, perhaps, for making candles, or enlarging the business of the undertaker, than the pampered, artificial brute. But farmers aim at the greatest profits; and when the market will give us as great a price for the lighter and leaner animal, I will supply them equally fed, duly exercised, and stormed upon. Because, deer, elk, partridges, &c., are better, taken in proper season, than domesticated stock, I am not certain as it follows that stall feeding is to be condemned. Whether the former would be relished better by pampering awhile, I am not prepared to say. The wild pigeon is said to improve by confinement and feeding; at all events, I have had them taken wild, when "barring the trimmings," I would as lief dine upon a paper of pins. Wild animals, birds, &c., I believe are taught by nature to seek for the muscle-forming food to give them strength and corporal activity. Mere fat would encumber them. Hence, jockeys match their horses sometimes by fattening the more spirited steed with oily substances, and feeding the slower one with those kinds of provender that form the muscle, and therefore a livelier action.

But if game be better because, it has more muscle and less fat, why would not the ox be better beef if worked while fed? I should probably secure more nearly the quantity of exercise he would take in a state of nature; for an ox would exercise but little in the open field if supplied with drink and food. Of course, the flesh would be less flabby and more solid, if put on while moderately working. Would it not be tougher, too?

I have been taught to believe that the lean of a very fat beeve is more tender, juicy, and better flavored than the lean of an animal poorly or moderately fattened; though the quantity of muscle be the same in each animal; and if the lean only be used as the part to be eaten, and the fat rejected as an article of diet, the whole grease-consuming community, I think, would be as much better as you suppose the wild game of the forest is better than the domesticated stock confined and fattened in the stall.

The graziers of England might, with propriety, be governed by different rules, on account

of climate, and perhaps, prices. I should prefer American authorities on this subject, where feed, breed, and climate are the same. And if experienced gentlemen would write more upon the different modes of fattening all sorts of stock with reference to cost, quality, and profit, it would be very interesting to some of your readers.

W. B. W.

*Fishkill, N. Y., May, 1851.*

#### NEW IMPORTATION OF MERINO SHEEP.

I TAKE great pleasure in complying with your request, and will give you a brief account of my late journey to Europe, for the purpose of purchasing Merino sheep, with a view to improve that breed in this country.

It was my original intention upon setting out from this country, to purchase some 300 or 400 pure-blooded Merinos, mostly in Spain; but I was unable to find any in that kingdom that would warrant me any compensation for my time and money. Before proceeding to Spain, I was repeatedly informed that the original Merino breed, (for which Spain was once so celebrated,) was nearly extinct; yet I had a desire to go there and see for myself. Before leaving France, however, I examined and purchased a few of the celebrated French sheep, near Rambouillet. On leaving that country, I directed my course to Madrid, where I was informed that most of the sheep owners lived. Here I spent several days visiting most of the large wool growers, in order to learn as much as possible in regard to the sheep of this country. I became fully satisfied that I should find no good, pure-blooded Merinos in Spain. They all gave nearly the same account of the degenerate condition of the sheep at the present time. They assigned the French invasion as the principal cause, which, with its attending evils, led to this degeneracy from the original stock. At the time of this invasion, nearly all of the best flocks were destroyed, and the remainder were sold for foreign countries, or mixed with other breeds. Still, after meeting with all these discouragements, I was not satisfied until I had seen them with my own eyes. Accordingly, I went about 200 miles further down, making my way through Estramadura, where all of the best sheep are said to be kept during the winter season. Here I examined many of the most noted flocks, and was then forced to believe all that had been told me before, in regard to their degenerate condition. I found them very small in size, thin in wool, and very deficient in oil, not presenting that dark surface which characterises the original

Merino. In many of the flocks, nearly half of them were the regular old-fashioned, black sheep, and I do not recollect seeing a single flock but what contained more or less of the last-mentioned variety.

Not finding anything in Spain to my mind, I concluded to go through Germany, and, if possible, find some of the pure, full-blooded Merinos. Having read the able communications of Charles L. Fleischman, contained in the Patent-Office Report of 1847, I thought it advisable to go directly to Stuttgart, where Mr. F. resides in the capacity of United-States Consul, and consult him in regard to the object of my search. I found Mr. Fleischman a very intelligent and obliging man, willing to assist me in every possible way. I spent one day with him, visiting an agricultural school near Stuttgart, where there was an interesting exhibition of agricultural implements, seeds, stock, &c.; also, collections in natural history. These were all very good except the sheep, which could only be reckoned about second best.

As Mr. Fleischman was formerly master of a large sheep estate, and thoroughly acquainted with nearly all of the best flocks in Germany, I persuaded him to travel with, and assist me in the purchase of some of the best Merinos that could be obtained in that country. With his guidance, I was enabled to see all of the best flocks. The breed is mostly Saxon. The fleeces are exceedingly light and fine, and altogether unfit for the wool-growing interests of the United States.

I did not find but two flocks of pure Spanish sheep in the whole country. One of these was small and had not been very well bred; but the other, I must say, as a whole, was the best lot of sheep I ever examined. Of these, I purchased 28, all that could be had for "love or money." The original stock from which these sprung, was brought from Spain, in 1811, having been selected from the far-famed Infantado Negretti flock, and kept pure and uncontaminated since that time. The flock from which I purchased, is owned in Prussian Silesia, and I am confident that they possess more good qualities than any other that I had the pleasure to meet with. They are much finer than our best Merinos in this country, carrying an even fleece over their whole body, and are woolled down to their very hoofs. In short, I am bold to say, that they are the most perfect sheep I ever saw. They are of a fair size and well shaped, with a dark surface and a clear white oil. There is a beautiful crimp to the wool, and withal, they

are very heavy shearers. These sheep were shipped from Bremen, in the steamer Herman.

Not being able to obtain so many as I wanted in Silesia, I returned again to France, and purchased a few more of the French sheep, making in all, 114 including the Germans. In selecting the French sheep, I did not choose the largest-sized, coarse-woolled ones, but rather those short-legged, thick-set, fine and thick-woolled, with a good deal of crimp, that gives the fleece a beautiful appearance. At shearing time, I intend to weigh the sheep and fleeces both of the French and Germans, in order to obtain the relative value of each breed.

I was very much disappointed in not finding more good sheep in Europe. Nearly all the flocks were inferior to those of this country. I am satisfied that we have, at the present time, more good sheep in the United States, than can be found in the old country, and that, in the course of a few years, we shall far outstrip them, as every one knows that the Americans are bound to go ahead.

GEORGE CAMPBELL.

*Westminster West, VI., June, 1851.*

#### PHILOSOPHY OF EATING.

Use but two or three kinds of food besides bread and butter, at a single meal, and never eat anything between meals. You should eat at regular hours, and but three times a-day, with two intervals of not less than five hours each, nor more than six.

Cold water retards digestion, and so does any liquid, if much is taken during or soon after a meal; half a glass at a meal is enough. From an hour and a half after a meal, until within half an hour of the next one, you may drink as much water as you desire; it is best, however, to drink but a swallow or two at a time, with an interval of half a minute or more; otherwise, you may take more than nature requires before you know it, just as in eating fast. If too much fluid is taken during meals, it dilutes the gastric juice, thus weakening its powers of digestion, and retaining the food longer in the stomach than is natural; it also causes an acid stomach, heartburn, fullness, belchings, and bad blood, producing, according to circumstances, a dryness, or rawness, or a sensation in the throat, like indigestion from other causes, whether from quality or quantity of food.

All errors as to diet arise from quantity or quality, and I propose one safe rule to each, applicable to all persons, and under all circumstances.

As to quality, the general rule is to eat that

which you like best, and which you find by close observation and experience is followed by no uncomfortable feeling about the head, hands, feet, nor stomach.

As to quantity, take as much at one meal as will allow you to become decidedly hungry by the next meal; this can only be determined by consecutive observations; but remember, never swallow an atom of food unless you are hungry; never force a particle of food on yourself; the brute creation cannot be induced to eat nor drink, if slightly ill or excited, guided only by their poor blind instincts; and we, who are as much higher than they, by the reason that is within us, ought to feel ashamed to act less wisely; and yet, nine tenths of all our ailments, acute and chronic, enter here; and nine tenths of them all might be cured thus, if taken in reasonable time, and if properly persevered in.

The finer all food is cut with a knife, before put into the mouth, the sooner and easier it is digested, on the same principle that a large piece of ice placed in a vessel set in water will require a longer time to melt, than if it were first divided into many small pieces. The gastric juice dissolves solid food from without inwards; hence food, especially all kinds of meat, should be cut up in pieces, not larger than a pea, before it is placed in the mouth, taking in as many pieces at a time as is convenient. This precaution would not be needed were persons to eat slowly, and masticate their food properly; but our national habits are otherwise, nor is there much hope of a speedy change in this respect.

For an hour after dinner, and half the time for other meals, do not lie down, do not sit to sew, nor maintain any stooping position; do not ride on horseback, nor study, strain, lift, nor perform any labor, bodily nor mental; a leisure stroll in the open air is best; or reading a newspaper; these require no mental effort. While walking, keep your hand behind you, and your chin on or above a horizontal line, and endeavor to feel in a good and cheerful humor with yourself and all the world.—*Dr. Hall.*

AMOUNT OF FOREIGN FLAX CONSUMED IN THE LONDON TRADE.—It is asserted that a sum a little short of £6,000,000 is annually expended in the purchase of foreign flax. The yearly consumption of this material for the London trade is computed at 120,000 tons. If this were grown at home, it would occupy 400,000 statute acres; the value of the crop would be £6,500,000, and that of the seed £1,400,000, making a total of nearly £8,000,000.—*Journal of Agriculture.*



## MR. MORRIS' SECOND ANNUAL SALE OF IMPROVED STOCK.

This sale took place at Mount Fordham, near New York, agreeably to the advertisement, on Tuesday the 24th of June. We have space only for the particulars of the pure-bred animals.

## SHORTHORN COWS AND HEIFERS.

- Lot 1, York, age unknown, owing to circumstances, pedigree could not be given on the day of sale, General Cadwallader, of Philadelphia, \$110
- " 2, Cleopatra, 9 years old, General Cadwallader, of Philadelphia, 85
- " 3, withdrawn from the sale.
- " 4, Coquette, 4 years old, one of the starred animals not recommended, E. H. Smith, of Smithtown, L. I., 50
- " 5, Red Lady, 4 years old, General Cadwallader, of Philadelphia, 175
- " 6, Eleanor, 4 years old, General Cadwallader, of Philadelphia, 135
- " 8, Miss Rolfe, 2 years old, A. Van Ingen, Jr., of New Jersey, 105
- " 9, Fame, 1 year old, General Cadwallader, of Philadelphia, 60
- " 10, Red Rose, 1 year old, one of the starred animals not recommended, G. Hopkins, of L. I., 30
- " 11, Kate, 5 months old, G. G. Hubbard, of Massachusetts, 140
- " 12, Lily, 3½ months old, Joel Terrell, of Oswego, N. Y., 80
- " 13, Beulah, 2¾ months old, General Cadwallader, of Philadelphia, 55
- " 14, Pocahontas, 11 years old, Henry Parsons, of Canada West, 100

## SHORTHORN BULLS.

- Lot 1, Logan, 23 months old, Oliver Slate, Jr., of Throg's Neck, N. Y., 175
- " 4, Mark Anthony, 4 months old, Mr. Wilson, of Wisconsin, 135
- " 5, Passaic, 2 months old, Joel Terrell, of Oswego, N. Y., 50

## DEVON BULL.

- Lot 10, Boston, 17 months old, General Cadwallader, of Philadelphia, 145

The shorthorn cross with the Dutch cows, called the "Improved Dairy Stock," sold from \$30 to \$120 each, according to age and quality.

The shorthorn and Ayrshire cross, sold from \$60 to \$90.

Southdown lambs 2½ to 3½ months old, sold from \$25 to \$30.

Suffolk pigs, in pairs, from \$20 to \$37.50.

The weather was highly favorable, and between 300 and 400 persons were present. Col-

onel James M. Miller conducted the sale with his usual ability and dispatch. The bidding was spirited, and the prices, upon the whole, an improvement on the first sale of Mr. Morris, in October, 1849. We noticed several of our most respectable citizens and country gentlemen present, and right glad were we to observe an increased taste on their part, for improved animals. The time will come when a country gentleman will feel as much ashamed to have an indifferent cow, sheep, or pig on his farm or about his house, as he now would to drive a mean horse or shabby carriage, or furnish his house with cast-away furniture. Among the foreigners present was General Paez, the distinguished patriot, and late President of Venezuela. We found him a good judge of stock, and he handled some of the finest present with evident satisfaction. The Devons were the most attractive to his eye, he highly appreciating their clean limbs and bloodlike form. They reminded him, he said, of a fine Andalusian horse. He informed us that he had several thousand head of Spanish cattle on his extensive *haciendas* in Venezuela.

Mr. Morris has a really beautiful place at Mount Fordham. The house is of stone, capacious, and of very handsome architecture, in the Italian style. The grounds around are ample, and on the large lawn in front of the house the cattle were paraded for inspection. Quite a number of elegant ladies were present, and seemed to take great interest in the stock. We have no doubt that they will exert their good influence hereafter with their husbands and relatives, to procure them a few fine animals to grace their lawns, as well as fine trees, shrubbery and flowers.

The collation was bountiful, and all seemed to partake of it with no little gusto.

Mr. Morris has now sold off all his grade animals, and will hereafter devote his attention to the breeding of none but pure stock.

## GRASSHOPPERS UNFIT FOOD FOR LAYING HENS.—

It is an old notion confirmed by modern experience, that laying hens should not be allowed to eat unsavory nor strong-scented substances, as grasshoppers, lest their eggs should be tainted with their flavor

PLOWING.—Never plow wet land in wet weather, much less harrow such, nor when it is wet in itself. Plow deep by degrees, and manure as you deepen. And, instead of the expensive horse, employ the profitable ox.

## SALT, URINE, AND LIME.

JOHN RUDOLPH GLAUBER, whose name deserves to be written in letters of gold, among many other useful experiments on various kinds of salts, relative to their fertilising properties, found, that no manure of the kind had such power in tillage, as sea salt calcined in a lime mixture. His prescription is as follows:—

To every 400 pounds of air-slacked lime, add 100 pounds of common salt; temper these together with urine, to a stiff mortar, which, make into small oblong rolls; when sufficiently dried, make a layer of wood, (or coal,) then a layer of these rolls, and so on till the quantity is used up; which set fire to, and let the whole burn out, taking care that no rain nor wet get to these rolls before burning, nor to the lime after burned. After calcination, reduce these rolls to a fine powder, and let it lie half a year, in a dry place, often turning the heap in order to expose it to the air.

Applied to a soil of medium quality, at the rate of 500 or 600 pounds to an acre, this mixture is stated to form a most powerful manure for wheat, which may be sown with the seed. Besides, it will destroy every insect and worm, and neutralise the poisonous acids in the soil.

## REMARKS ON THE PEDIGREE OF THE ARABIAN HORSE.

THE Darley Arabian was brought over by a brother of Mr. Darley, of Yorkshire, who, being an agent in merchandize abroad, became a member of a hunting club, by which means he acquired an interest to procure this horse. He was sire of Childers, and also got Almanzor, a very good horse; likewise, a white-legged horse of the Duke of Somerset's, full brother to Almanzor, and thought to be as good; though, from meeting with an accident, he never ran in public. Add Cupid and Brisk, both good horses; Dædalus, a very fleet horse; Dart, Skip Jack, Maurice, and Calypso, good plate horses, though out of bad mares. He covered very few mares, except Mr. Darley's, who had but few well bred besides Almanzor's dam.

The second source from which has sprung a very numerous class of our best horses, may be said to be the Byerly Turk. He was Captain Byerly's charger in Ireland, in King William's wars (1689). He did not cover many thoroughbred mares, but was the sire of the Duke of Kingston's Sprite, the Duke of Rutland's Blackheart and Archer, the Duke of Devonshire's Basto, Lord Bristol's Grasshopper, &c.

And the third and favorite origin of many, but whose progeny are certainly not so numer-

ous as the other two in the production of racers, is the Godolphin Arabian. He was a brown bay, about 15 hands, with some white on the off-heel behind. There is a picture of him and his favorite cat in the library at Gog Magog, Cambridgeshire, where he died, in the possession of Lord Godolphin, in 1753, then supposed to be in his 29th year.

That he was a genuine Arabian, his excellence as a stallion is deemed sufficient proof. In 1781, then the property of Mr. Coke, he was teaser to Hobgoblin, who, refusing to cover Roxana, caused her to be put to the Arabian, and from that leap was produced Lath, the first of his get.

Many years ago, I was struck with the originality of some genealogical tables that were designed by a Mr. Lounin, a Russian, which have since been published in the Russian Stud Book. Mr. Lounin, who is since dead, was not far wrong in taking the above horses as the three sources from which all our best animals have sprung. The plan adopted, was, to trace the paternal side, and enumerate only such horses as were grandsires of winners; by which means, we have a collection from which, you will perceive, it is easy to derive the pedigrees of all our horses of the present day.

1689 Byerley Turk Jig	1734 Godolphin Arabian	About 1700 Darley's Arabian
1718 Partner	1734 Cade	1716 Bartlett's Childers
1749 Tarter	1748 Matchem	1732 Squirt
1758 Herod	1767 Conductor	1750 Marok
1774 Highflyer	1782 Trumpeter	1764 Eclipse
1784 Sir Peter	1796 Sorcerer	1773 Pot-8-o's
1799 Walton	1808 Soothsayer	1790 Waxy
1811 Partisan	1815 Welbeck	1807 Whalebone
	1823 Bedlamite	1722 Camel

Now, by only inserting such horses as were sires of stallions that got winners, we have the entire paternal line of every horse in the kingdom.

Take, for instance, Touchstone, the property of the Marquis of Westminster, and he would come into the above list, being the sire of Coth-erstone, who is sire of Glauca, and of many other winners. Touchstone was got by Camel. A fashionable stallion is Melbourne; he was got by Humphrey Clinker; Humphrey Clinker was got by Comus, and Comus, by Sorcerer. Melbourne, a good horse, is the sire of Canegore, the best mare of her day; he is also sire of Prime Minister, second favorite for the ensuing Derby.

So is the stallion Epirus; he was got by Langar; Langar, by Selem; and Selem, by Buzzard—Woodpecker—Herod. Epirus is the sire of Pyrrhus the First, winner of the Derby he is

also sire of the first favorite for the Derby this year.

Bay Middleton, the property of Lord Clifden, (sire of the Flying Dutchman,) was a good horse; he won the Derby, and was never beaten; he was got by Sultan, and comes from the same paternal blood as Epirus.

And thus you will perceive that an easy reference is obtained to the blood of any horse of the present day, at least on the paternal side.—*Veterinarian.*

#### SALE OF MR. VAIL'S STOCK.

This took place at Mr. Vail's farm, in Troy, on the 26th of June, as advertised. Col. James M. Miller was the auctioneer. The prices are higher than any obtained at a public sale of shorthorns within the last nine years. This is an evidence that improved animals are becoming more and more appreciated, and that these sales, so long as thus honorably conducted, are the best means of disposing of a large stock. They also have the advantage of bringing a large number of breeders together, for mutual improvement and advantage.

#### COWS AND HEIFERS.

Lot 1, Lily 2nd, 6 years old, General Cadwallader, of Philadelphia,	\$170
" 2, Lily 3d, 3 years old, Henry Wells, Cayuga county, N. Y.,	135
" 3, Lily 4th, about 18 months old, General Cadwallader, of Philadelphia,	90
" 4, Lily 5th, calved March 19th, 1851, General Cadwallader, of Philadelphia,	165
" 5, Fun, 7 years old, Henry Wells, of Cayuga county, N. Y.,	235
" 6, Dahlia 5th, 2 years old, General Cadwallader, of Philadelphia,	75
" 7, Eunice 2nd, 10 years old, General Cadwallader, of Philadelphia,	160
" 8, Eunice 3d, 8 years old, John Osborne, of Oneida county, N. Y.,	125
" 9, Wilddame 4th, 3 years old, General Cadwallader, of Philadelphia,	225
" 10, Wilddame 5th, calved Feb. 20th, 1851, (sick,) General Cadwallader, of Philadelphia,	55
" 11, Daisy 3d, 7 years old, S. P. Chapman, Clockville, Madison co., N. Y.,	230
" 12, Daisy 5th, about 20 months old, General Cadwallader, of Philadelphia,	150
" 13, Fillpail 5th, about 20 months old, General Cadwallader, of Philadelphia,	95

Lot 14, Victoria 4th, 4 years old, Henry Wells, of Cayuga county, N. Y.,	90
" 15, Rosette 2nd, 4 years old, General Cadwallader, of Philadelphia,	175
" 16, Rosette 3d, about 20 months old, William Osborne, of Oneida county, N. Y.,	80
" 17, Rosette 4th, about 10 months old, General Cadwallader, of Philadelphia,	105
" 18, Yellowskin, 2 years old, General Cadwallader, of Philadelphia,	110
" 19, Willy, 14 years old, General Cadwallader, of Philadelphia,	90
" 20, Profitable 2nd, about 10 months old, Henry Wells, of Cayuga county, N. Y.,	125
" 21, Victoria 5th, about 2 months old, General Cadwallader of Philadelphia,	75

#### BULLS.

Lot 24, Beppo 3d, calved Sept. 2d, 1848, Thomas Richmond, of Ganauque, Canada West,	150
" 25, Leopold, calved Oct. 6th, 1849, Cameron, near Kingston, Canada West,	50
" 26, Grand Duke, calved Feb. 24th, 1850, John Osborne, of Oneida county, N. Y.,	95
" 27, Falcon, calved Sept. 23d, 1850, Thomas Richmond, of Ganauque, Canada West,	90
" 28, Marquis, calved Aug., 1849, Thomas Richmond, of Ganauque, Canada West,	60
" 29, White Prince, calved Apr. 13th, 1851, F. Yates,	55

#### HEIFER CALVES.

Lot 30, Beauty, about 2 months old, Wm. Osborne, of Oneida county, N. Y.,	90
" 31, Red Lady, about 2 months old, General Cadwallader, of Philadelphia,	60
" 32, Fashion, about 6 weeks old, (not on catalogue,) General Cadwallader, of Philadelphia,	30
" 33, Fillpail 6th, a yearling heifer, (not on catalogue,) Wilson, of N. Y.,	90

\$3,520

At private sale and not on catalogue, Lady Barrington 5th, 2 years and 10 months old, got by premium bull Meteor, out of Imported Lady Barrington 3d, Aaron Clement, for T. P. Remington, of Philadelphia,

350

Hilpa 4th, roan heifer calf, dropped April 9th, 1851, being 2 months and 17 days old, got by Duke of Wellington, out of imported Hilpa, S. P. Chapman, Clockville, Madison county, N. Y.,

300

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 \$4,170

It will be seen by reference to the above statement, that there were 19 cows and heifers sold, which brought \$3,010, averaging about \$160 each.

Seven heifer calves brought 640  
averaging \$91

Seven bulls and bull calves, 520  
averaging \$74 each.

In all, 33 animals including two heifers at private sale, brought 4,170

The whole lot, old and young, averaging \$126.

#### WOOL GROWING IN VIRGINIA—A REMEDY AGAINST DOGS.

At the present time, when the attention of the people of our northern states is turned to Virginia, as offering a fine field for investment in her lands for agricultural, mining and manufacturing purposes, it may not be amiss to point out the many advantages possessed by a very large portion of the state for the wool-growing business. This subject has been brought to my mind by seeing the fact stated, in many newspapers, that, out of 100 parcels of wool collected by an extensive wool dealer at the north, from various parts of the United States, for exhibition at the World's Fair, the palm was awarded to a parcel grown by the Messrs. Patterson, on their sheep grounds, in Bedford county, Virginia.

The whole tier of Piedmont counties, immediately under the Blue Ridge, from the Potomac River to the North-Carolina line, namely, Fauquier, Orange, Albemarle, Bedford, Patrick and all intermediate counties, have been fully proved by a few northern wool growers settled in them, to be most admirably adapted to this business—the most suitable grasses for sheep grow finely. Diseases incident to this animal are of seldom occurrence, and the wolf, that deadly foe to sheep, is rarely ever seen. Franklin, Henry, and Patrick, the least opened of this range of counties, contain very few, if any wolves. These three counties offer, on account of the low price of land and the absence of all ravenous wild animals, a great opening for sheep grazing. Large tracts of uncleared land are to be had there on

mountains and hill sides, for perhaps, less than 50 cents per acre, which, if partially cleared of its undergrowth, (that the rays of the sun might strike the earth,) would put forth grass spontaneously, and make excellent ranges for sheep.

The general evil of dogs, which I see is claiming at present the most stringent legislation in our northern states to protect the sheep, likewise exists with us. Our own legislature has done much, and will, no doubt, do more, at the proper time, to eradicate this evil. In the meantime, let me publish to the sheep-raising world, a remedy against the destruction of sheep by dogs, which was given me a short time since, by a highly respectable and valued friend, himself an extensive wool grower. It consists simply in placing on one sheep in every ten of the flock, a bell of the usual size for sheep. The reasoning of my friend is this: The instinct of the dog prompts him to do all his acts in a sly, stealthy manner—his attacks upon sheep are most frequently made at night while they are at rest, and the sudden and simultaneous jingling of all the bells, strikes terror to the dogs; they turn tails and leave the sheep, fearing the noise of the bells will lead to their exposure. The ratio of bells might be made to vary according to the size of the flock.

The importance of sheep preservation from dogs, the writer hopes, will claim for this communication an insertion in most of the papers of the Union, that a remedy so cheap and simple may be fully tested.—*Richmond Whig.*

#### SHORTHORN BULL EARL OF SEAHAM.

This month we give a portrait of the distinguished bull, Earl of Seaham (10,181). He was bred by John Stephenson, Esq., of Wolviston, county of Durham, England, and was calved April 21st, 1848, now three years old. He was selected by Mr. Stevens, and was imported by him and Colonel Sherwood. He was shipped from Liverpool in June, and arrived in New York in August. In one month after his arrival, and before he had recovered from the effects of his voyage, he was exhibited at the Show of the New-York State Agricultural Society, at Albany, in September, 1850, and won the first prize as the best two-year-old shorthorn bull shown. In October, he was exhibited at the cattle show of the American Institute of the City of New York, and won the first prize as the best shorthorn bull, in the aged class of shorthorns, or bulls two years old and upwards.

Earl of Seaham is of the famous *Princess* tribe of shorthorns, that is so eminent for style,



quality, and milking capacity. Colonel Sher- | made 49 pounds of butter. Another cow of  
wood's Red Rose, now four years old, whose | this tribe, Princess I, now four years old, sister

EARL OF SEAHAM.—FIG. 54.—The property of Ambrose Stevens and J. M. Sherwood.



dam is a sister to the dam of Seaham, is an ex- | to the dam of Earl of Seaham for two months  
traordinary milker, and from her milk, in 25 days, | before being put to grass, this season, on hay  
ending on the 6th of June, 1851, there were | and turnips, gave daily, from 20 to 25 quarts of

rich milk, and only three or four days during these sixty, gave less than 23 quarts a-day, and for more than thirty days of the sixty reached 25 quarts. She doubtless would have made as much butter as Red Rose, had the experiment been tried.

It will be seen by an advertisement in our columns, that Colonel Sherwood offers this fine bull for sale; a better one can be bought in no country, and his equal, certainly not in this.

#### ECONOMICAL MANURE SHEDS.

H. M. BAKER, a Virginia farmer, thus describes the manner of protecting his manure from washing rains and the exhausting power of the sun:—

"Set a row of forked posts through the cattle yard, 10 feet high to sustain a range pole. Nine feet distant, set another row, eight feet high; and nine feet further, another row six feet high; put range poles upon these and cover the whole with old rails or poles, and brush, and upon these, put straw, cornstalks, or sedge, to form a roof, which will shed off most of the water and all the sun. Brace the corners well to prevent accidents from high winds, and heap up all your manure, commencing at one end, so as to allow cattle to occupy the other portion, and you will gain twice the cost of the shed every year."

#### A SHEEP SHEARING FESTIVAL.

MR. A. L. BINGHAM, of Cornwall, Vermont, as well as his brother, Mr. Merrill Bingham, keeps large flocks of the French and other Merino sheep. The last of May is the time of their sheep shearing; and in order to make it more social and agreeable, and show the country what their flocks would produce, they invited their friends and neighbors to be present on the occasion. Mr. E. D. Barber, of Middlebury, gives the following report of the clipping of the French Merinos from the importation of Mr. Taintor. The fleeces were in the dirt. How much clean, well-washed wool they would have produced, we are unable to say:—

"Mr. A. L. Bingham's flock of French Merino sheep consists of 93 breeding ewes, 23 yearling bucks, and 105 ewes and buck lambs; being from two to five months old, and weighing from 75 to 140 pounds, according to their age. A three-year-old buck, recently imported, weighed 339 pounds, and sheared, with only ten months' growth of wool, 31½ pounds. A two-year-old buck, not shorn, weighed 217½ pounds. For this last-mentioned buck, Mr. Bingham has been offered \$1,000 by different men. The following

is a statement of the weight of the sheep and of their fleeces, as sheared the 20th of May:—

Ewe No.	Live weight.	Weight of fleece.
7,	122 lbs.	19 lbs. 2 oz.
40,	157	17 0
11,	149	18 6
112,	118	17 12
31,	169	14 14
110,	128	22 6
139,	92	19 12
85,	123	18 12

Making the average weight of the sheep, 132½ pounds, and the average weight of the fleeces, about 18 pounds, 7 ounces. On the 21st of May, he sheared six more sheep, the weights of whose fleeces were as follows:—

No. 201,	17 lbs.	No. 200,	16½ lbs.	No. 38,	18½ lbs.
90,	16½	85,	14½	250,	16½
201,	17½	117,	15½	230,	15
31,	15½	39,	21½	110,	20
71,	18	31,	18½	7,	19
71,	16½	39,	17		

Making the average weight of the fleeces about 17 pounds, 4 ounces.

Mr. Merrill Bingham's flock produced the following shearing:—

No. 111,	17 lbs. 0 oz.
5,	13 5
6,	12 6
59,	12 14

Making the average weight about 13 pounds, 14 ounces.

On the next day, he sheared five breeding ewes, the weights of whose fleeces were as follows:—

No. 81,	19 lbs. 2 oz.
67,	16 12
55,	15 8
54,	16 2
201,	15 14

The average being about 16 pounds, 10 ounces. At the same time, he sheared eight half-blood ewes, one year old, being a cross of the French with the Spanish Merinos, with the following result:—

No. 1,	8 lbs. 14 oz.
2,	8 12
2,	8 4
4,	7 6
5,	8 0
6,	7 8
7,	9 6
8,	7 3

The average being about eight pounds, two ounces. Mr. M. Bingham imported, in March last, 13 French Merino bucks. He has sold

seven of them and received prices for them varying from \$200 to \$300. One of them he has been offered \$400 for and refused the offer. Although I did not see the whole of these sheep sheared, and the fleeces weighed, I have the above facts on authority upon which I place implicit reliance. I certainly would not give them to the public in this shape unless I had the fullest confidence of their truth. For a part of them I can vouch from my own personal observation. Can these sheep be beaten in the United States? I believe not, though I do not profess to be "booked up" so perfectly as some others in these matters. At all events, if they can be beaten, this statement may serve to call forth the proof."

Nothing gives us more pleasure than to see a growing disposition among our farmers to get up similar festivals of one kind and another among themselves. By seeing what each other are doing, they enlarge their minds, promote agricultural improvements much more rapidly among themselves than can be done under the isolated, and we add, somewhat niggardly and selfish spirit that has been too long prevailing in our country. English farmers have ever been noted for these kinds of festivals, and this is one reason why they are so enlightened and prosperous men. They not only have their sheep shearings, but sheep shows and sales; they also have festivals for examining each other's grain, grass, and vegetable crops, and various other things.

After the shearing was over, all present sat down to a capital dinner, where most of the delicacies and substantial of the season were served up evidently to the gratification of the company. Our only wish is, that we could have been present to enjoy the festival.

#### REVIEW OF THE JUNE NUMBER OF THE AGRICULTURIST.

*Virtues of Milk.*—Here is a short article reiterating the old saw—"milk is a most perfect diet—nothing like it;" because chemical science finds the necessary constituents of human food in its composition. And yet, notwithstanding the truth of science, the truth of experience proves it is not healthy in a country affected with bilious diseases; in many places, it is absolutely poisonous, producing disease and death. The writer says it is necessary it should be pure, or it will prove a curse rather than a blessing. Very sound doctrine, that; and equally sound to say one half at least consumed by the human family is impure, and consequently, unfit for human food. I am aware of the unpop-

ularity of refusing to allow milk all the virtues claimed for it; but, nevertheless, I believe it occasions more sickness than any other single article of food.

*A Jaunt in Ohio, No. 3.*—This article is not so interesting as the previous ones. The writer, whoever he is, is most evidently not in love with Ohio farming. The description of Colonel James' "grand prairie farm," which "Visitor" rode half a dozen miles to see, is entirely lost sight of in his poetical picture of an Ohio prairie under an October sun. After gazing himself full of it, (I hope he afterwards found room for that "substantial lunch,") he rides away and leaves us to imagine all sorts of things we please, about this grand prairie farm.

*Brown Corn.*—The writer thinks it desirable for every farmer to raise a small quantity of this corn for early feeding. This may be desirable at Poughkeepsie, but not much further south. All corn from as far north as where this variety came from becomes quite worthless when planted in the Carolinas.

*Value of Sewerage Water.*—This is the very point I have always contended for, that we are sending ships to Peru to bring the very article which we daily waste in such immense quantities, not only in all the cities, but upon almost every farm of the country. How many farmers save the vast amount of fertilising matter formed from human food? How many save bones, blood, hair, horns, hoofs, and other offal of butchered animals for manure? Who ever thinks of manuring a hill of potatoes with an old pair of boots, or an old coat or hat? What a laugh my neighbors had at the old Captain and his book notions, when I planted a wheelbarrow load of brick bats and old mortar under each of my young fruit trees. "That's queer manure," said they. Yes, it was queer to them, but it made the trees grow; and so would a thousand wasted substances double our farm products, if saved and applied, not forgetting the sewer water from every farm kitchen, which should be conveyed in pipes to a tank filled with loam and all sorts of scraps and garbage generally wasted.

*German Agriculture and German Economy.*—It is idle to expect either to be practised here while land is so cheap, so abundant, so fertile, that the owners have no inducement to economise to the extent which necessity compels them to in the "Faderland." But the time is coming.

*The Purik Sheep.*—Why cannot these domestic animals be substituted in place of dogs? If people must have pets let us encourage them to

keep such as are good for something. Dogs, in general, are worse than worthless. Let our agricultural societies look to the matter. If they can furnish a substitute for the poor man's dog, they will do more good than they ever have done before.

*Bathing.*—This little paragraph ought to be printed in large letters and hung up in every sleeping room in America. Read it again, this hot weather. It is cooling.

*Worthless Furniture.*—I grant a lazy woman is so, but not the most so. Words to express the superlative degree of greater worthlessness of her lazy, drunken husband, have not yet been invented.

*Pork—Bacon—Ham, No. 3.*—The value of this number is not equal to the preceding ones. The directions about butchering and cutting up are entirely too English for our use. What would some of those professional butchers think of one man cutting seven hogs a minute, as has frequently been done at Cincinnati? The recommendation to cool it 24 hours before salting, is not adapted to the latitude where cotton grows. If suffered to remain that long, saltpetre would not save it.

*Kentucky Cattle Shows.*—A Virginian entering Kentucky through the Cumberland Gap is surprised to find a portion of that state as uninviting as some of the poor land of his own. My dear sir, every state has its poor corners as well as rich centers, like Kentucky. Florida has her Everglades; Georgia, her poor, sandy pine plains; South Carolina, her poor ridges of drift sand; North Carolina, her ditto, as well as vast swamps; Tennessee, her mountainous districts, valued at one cent an acre; Missouri has miles of mountains worth nothing except for lead and iron; Illinois, rich as is her soil, is uninhabitable over vast tracts of prairie, void of timber, and so on of all the rest. In some things one is superior to the other—in other things, the reverse. Let us be content.

But is it any wonder agricultural societies flourish in Fayette and Bourbon? It is not the rich soil. It is not because you found such a fine-looking set of intelligent men. But it is for the reason that always has and always will make every cause flourish. Female influence is the true secret of success; and the failure of every agricultural society ever organised, can be traced to the foolishness of man in undervaluing and neglecting to provide in time for the security of the main brace of every ship afloat. Man is the slave of woman, (Mary is looking over my shoulder and says, "Oh! father"—but I

repeat it,) and can never prosper in an attempt to abolish her power. If, then, agricultural societies wish to succeed, let them look to the highest of all human authority—the great governing power—female influence.

*A Chapter on Fowls.*—I had long since determined, as had many other of your readers, never to look at another of these eternal cacklings of a brood of old superannuated Biddies, concerning this fowl humbug; but inadvertently got into this chapter and went through it, laughing heartily all the time, at the way this heavy-fisted defender of common sense knocks down the Shanghaes, Burampooters, *id genus omne*, of all the big rooster family. But Mr. A. is entirely mistaken in the character of the American people, if he supposes for a moment he can stop the current of folly in which they are floating through all the phases and fogs of the hen fever, by any amount of argument or ridicule. He might as well attempt to stop the ever onward current that passes his own door. Let both run—both will find a Niagara fall at last, and *great the fall will be*.

*Fowl Breeding* is another article upon this subject, already rung upon so many changes, your readers would gladly give it one more wring, such as fowls often get about thanksgiving time.

*The Ladies' Department.*—Where is it? Blotted out entirely. Well, man is the most obstinate animal that ever existed, undoubtedly—that one which grunts, fights, and squeals, and goes ahead backwards, not excepted. I reviewed you for trespassing upon the rights of the ladies; instead of amending, you get up your bristles, and upset the whole page into pie, I suppose, and not one single sentence, either in that department or any other, is to be found in this June number, intended to attract the eye, or win the female heart. Now, as you have had the gratification of your obstinacy, and shown us you can do just what you have a mind to, with your own paper, take an old man's advice who has had some experience, and in future show yourself a little more amiable towards your fair readers. If you wish your paper to go abroad doing good in the world, you must cater for those who are its rulers. The influence of one woman to extend its circulation, is worth ten men. Can you expect that influence when you do not publish one single line exclusively for their use? [Please Sir, Master Captain, we had to leave out the Ladies' Department to accommodate nobody but yourself.—Eds.]



**STRAWBERRIES—THE SECRET OF GROWING THIS FRUIT SIX MONTHS CONTINUOUSLY.**

This secret has been discovered and practised by Charles F. Peabody, of Columbus, Georgia, one of the editors of the "Soil of the South," for several years, not as a theory or mere experiment, nor accidental production, but as a science—a study of time, successfully carried out for profit; for he sends his market wagon into the city loaded with this rich luxury from March till September; and last year, his vines continued to ripen fruit until Christmas.

What is the secret? our fair readers exclaim. What new variety? No other than Hovey's seedling, impregnated by early scarlet, and *never manured*, but kept continually moist by artificial watering; for which purpose, he uses a garden engine.

For four years, Mr. P. cultivated the same variety in rich garden mould, manuring liberally every year, and at any time during summer could have mowed a heavy swath of green luxuriant vines, which would have made very good hay, but that was not what he wished to grow. Failing to get fruit by garden culture, he commenced the experiment which for six years has proved so eminently successful. He cleared off a strip of low land along a little rivulet, the soil of which is coarse sand and loose gravel, intermixed with clay slightly, and of course covered with forest mould, digging out the roots of a thick growth of bushes sufficiently prepared the land. The vines were then set in rows, six of Hovey and one of scarlet, and the surface has never been disturbed since by spade or hoe, except so far as going over the ground once or twice a-year to cut out here and there a decaying vine or bunch of grass or weeds—few of which, however, in consequence of using no manure, ever make their appearance; neither do the plants run to vines, spreading all over the surface every year as they did in the garden. The whole strength seems to be exerted for the production of large rich berries to such a degree that the ground is *red with fruit, not green with leaves*; and this not upon a little plat, but over a field of five acres.

And does he never manure them? is undoubtedly asked by every tyro in the business of growing strawberry vines. Mr. Peabody grows roots, stems, and fruit. I repeat, he never manures, never digs the ground nor turns under the old roots to give place to new ones. In autumn, he gives a light dressing of the surface soil of the forest, and covers the ground with leaves; these remain until decayed, and serve to keep

the berries clean during the long bearing season. This, and the watering every hot day when it does not rain, is the great secret of growing strawberries, not only six months, but last year he actually had them upon his table every month but two—January and February. Of course, at the north, the bearing season could not be of equal duration, but it may be greatly extended by the same course of cultivation.

SOLON.

**HEMP COTTON.**

MR. GEORGE C. DAVIS has exhibited in Louisville, Kentucky, a specimen of hemp prepared in such a manner that it resembles flax cotton, and seems equally well adapted for the manufacture of textile fabrics with that new article. The process of Mr. Davis is much more simple, quicker done, and less expensive than M. Clausen's, and he thinks the cost of preparation will not exceed half a cent a pound, which will enable hemp growers to compete with cotton, and manufacturers to choose between cotton, flax, or hemp, at about the same prices. Perhaps the same process applied to the cotton stalks may produce similar results, as well as several other fibrous plants, hitherto considered worthless.

We believe the discovery of a new method of preparing fibrous plants for the manufacturer is destined to work a revolution in trade at no distant day.

**NAMES OF PLANTS.**—The importance of having all plants, including fruit trees, properly named, even in small gardens, cannot be too clearly pointed out. A plant may have beautiful foliage and flowers, but without a name, it yields comparatively little interest. Every plant has a history of its own, and the first step towards obtaining a knowledge of that history is its name; the next, its native country. A garden of plants without names is like a library of books without their exterior superscriptions.

**SENSE OF HEARING IN THE HORSE.**—The hearing of the horse is remarkably acute. A thousand vibrations of the air, too slight to make any impression on the human ear are readily perceived by him. It is well known to every hunting man, that the cry of hounds will be recognised by the horse, and his ears will be erect, and that he will be all spirit and impatience, a considerable time before the rider is conscious of the least noise.—*The Horse and his Rider.*

## Horticultural Department.

BY L. F. ALLEN.

### MULCHING.

WE have talked somewhat of mulching, and particularly as applied to newly-planted trees and shrubs. The philosophy we consider to be this: Recently-removed, and newly-transplanted roots are tender, and particularly sensitive to harsh treatment. They may be compared somewhat to amputated or wounded limbs of the animal body, which require more attentive treatment and increased care beyond the healthy and perfect limbs maintaining their natural growth and condition. Torn rudely from their natural bed, and lacerated in removal as they usually are, and transplanted into a different soil from which they previously occupied, a thorough revolution is made in their habits. Increased care is therefore required in their cultivation until they have become habituated to their new condition. They require an equable degree of temperature and moisture. Mulching screens them from the violent excesses of a fervid sun; it preserves an equable moisture; it retains the gases and salts of the ground, otherwise escaping from the powerful action of the sun on the roots, thus soothing and knitting them into new life in their struggles for existence and growth. The every-day examples of the more rapid growth of young trees under the shade of a fence or stone wall is a practical demonstration of this, and the superior fertility of soil under such fence or wall in which the various elements of fertility within it are preserved by their shade, over what are to be found in those parts of the field exposed to the scorching rays of the sun; and the washing from the heavy rains, are additional proofs of the benefits to be derived from mulching, which is in fact, the same principle differently applied. The air can equally as well penetrate through and beneath the mulch as through the soil; and as a matter of economy, mulching has an absolute advantage over ordinary cultivation in keeping down weeds and all noxious growths. Added to this, our own experience of the effect in giving increased growth and health to mulched trees and shrubs, over those not so treated, give this practice, in our judgment, a greater value than any mode of procedure, with newly-planted roots, whatever; and even in old plantations, where increased stimulus is necessary, nothing which we have ever tried has been so potent in its improving effects. We recommend it without stint or measure, to all who are engaged in

either fruit or ornamental tree or shrub plantations.

Of one thing, in all mulching practice, do not fail. If your grounds are ever infested by mice, the mulching must be removed as early as September, by which time the usual season's growth of new wood will have been made. If it is left later in the season, it will serve as a harbor for vermin, and they will inevitably destroy the bark of the stem, and consequently the tree or shrub itself. Let the mulch be spread one, two or four feet from the stem, as the size of the tree may warrant, and all the better, if it reach out as far as the roots may spread into the surrounding soil.

### ORCHARD CATERpillARS.

NOTHING so defaces an orchard, as the caterpillar, and certainly nothing of the insect kind can be more destructive, if permitted to prey upon it. The sooner they are destroyed after making their appearance, the better. The remedy is simple and expeditious.

Take a stick of the necessary length to reach their nest from the ground; drive two shingle nails crosswise through the small end within an inch of the point. Early in the morning, or in a rainy or lowery day, when the worms are all snug in the nest, take up your line of march among the trees. Be provided with a little spatula, or paddle, made of a shingle or a mason's trowel, if you have one. Poke the stick, nail end up, into the nest, wind it round carefully two or three times, and the nest and caterpillars with it will all be entangled in the nails. Draw it down to you. With the point of your paddle, or trowel, disengage the nest, and then crush them with its flat blade upon the bole of the tree. If the *expressed juice* of the worm does not make the bark softer, the caterpillars will eat no more leaves. Hundreds of nests may be thus destroyed in a day.

Many people think the birds will destroy the caterpillars. Sometimes they do; but few birds like these coarse, hairy creatures. They much prefer earth worms. And when they are so easily destroyed, it is hardly worth while to leave that for the birds which can be so much more effectually done by the hand.

The small August caterpillar which weaves a large web over several branches of the tree, enclosing both leaves and fruit as it progresses in search of its food, is more destructive than the early caterpillar; but its treatment may be the same. All remedies of sulphur, soot, ashes, and lime are uncertain. When you know the

worm is dead, you are certain that his ravages are ended, and these insects, like some other things in the world, have various ways to circumvent the ingenuity of traps and boluses.

#### CRANBERRIES.

THE cultivation of this valuable fruit has been recommended on uplands; but we do not believe in it. The cranberry is a *water* plant, and so long as there are such large tracts of natural cranberry land, which can be profitably devoted to no more productive purpose, we believe it better that they should retain their own primitive soils. In marshy lands, flowed more or less by fresh water, in a loose soil, they thrive wonderfully; and as they are a fruit always saleable in their season, and largely consumed where they can be obtained, they will continue an object worthy the attention of those who have the proper soil for them.

One, two and even three hundred dollars have been obtained from the produce of a single acre in one year! But they require care, as does everything worthy of cultivation. Yet, so mistaken have been the notions of some over-nice people, that they have, at great expense, drained a cranberry marsh, which, under proper care and husbandry for cranberry culture alone, would have yielded a net annual income of \$200 or \$300 value per acre; yet, when drained and put under cultivation for ordinary farm crops, would yield scarcely half that income, so little did they consider the value of wild fruit.

For particulars of cranberry cultivation we refer to several articles in our past volumes.

#### KEEP YOUR FRUIT TREES STRAIGHT.

TREES in an open exposure often acquire a leaning position from the prevailing winds. This should not be suffered beyond a certain stage of the tree. When as large as one's wrist, they should be set up erect, and, indeed, thrown into the wind at an angle of ten or fifteen degrees, in order to bring them ultimately into a straight position. This is best done by obtaining crotched limbs from the woods, eight to twelve feet long, and placing the butt end, which should be sharpened, on the ground, and the crotch end either against the trunk immediately, beneath the branching point, or against a large outer limb, if more convenient, securing it from chafing in the crotch, by a padding of straw, or litter, and setting the tree at once up to the desired angle of elevation. Loosen, also, the ground on the windward side of the root so that it will not bind, and the work is accomplished.

Let this be done when the tree begins to make its summer growth, or soon after leafing out. One season, if the tree is thrifty, will be all that is required. If, however, it be obstinate, repeat the trial another year. The remedy is sure. Even large trees, which have acquired a permanent lean, may be thrown into an erect posture, by loosening the earth at the root, and occasionally cutting off an obstinate large root, without injury to its growth, and thus be made slightly. An erect tree will be longer lived, and more fruitful than a leaning one, and not half so subject to casualty as if left to its own guidance.

#### THE BLACKBERRY CULTURE.

OF all the berries which our land produces, none, in their season, excel the high blackberry of the northern states. Growing wild in our mountain passes and glens, among bush pastures, or by the highways, or along the fences, they produce abundantly without care or cultivation, and in certain portions of the country, they are, perhaps, the most profitable object to which the land they occupy can be devoted when a ready market exists for them. Thousands of bushels are annually brought into New York, where they find a rapid sale and consumption with all classes of our people.

But we believe they can be produced in greater abundance and of better size and quality by cultivation, and to a good profit also. In the neighborhood of Boston, they are so produced, and of a size and flavor surprising to those who have only tasted the wild blackberry of the hedge rows and pastures.

Their cultivation is extremely simple: Take good land—old pastures are perhaps the best—plow it deeply and well, drag it thoroughly, trace out deep furrows six feet apart, and plant in autumn—October or November—four feet apart in the rows, the young sprouts which grow wild in the open grounds. Cultivate them as you would corn, keeping the rows clean of weeds, and topping the bushes in spring, as you would raspberries. The production of berries will be enormous, large, and delicious in flavor, and sell for double the price of the wild. Try it, and see whether the blackberry thus cultivated will not pay.

**ASPARAGUS.**—As asparagus is esteemed one of the greatest delicacies which the garden affords, no person fond of it should be unacquainted with the method of producing it, if practicable, in every month of the year.

## Ladies' Department.

### ECONOMICAL USE OF NUTMEGS.

If a person begin to grate a nutmeg at the stalk end, it will prove hollow throughout; whereas the same nutmeg, grated on the other end, would have proved sound and solid to the last. This circumstance may thus be accounted for: The centre of a nutmeg consists of a number of fibres issuing from the stalk and its continuation through the centre of the fruit, the other ends of which fibres, though closely surrounded and pressed by the fruit, do not adhere to it. When the stalk is grated away, those fibres, having lost their hold, gradually drop out, and the nutmeg appears hollow; as more of the stalk is grated away, others drop out in succession, and the hollow continues through the whole nut. By beginning at the contrary end, the fibres above mentioned are grated off at their core end, with the surrounding fruit, and do not drop out and cause a hole.—*Anon.*

### METHOD OF MAKING TOAST WATER.

TAKE a slice of fine and stale loaf bread, cut thin, (thin as toast is ever cut,) and let it be carefully toasted on both sides, until it be completely browned all over, but nowise blackened nor burned in any way. Put this into a common, deep stone or China pitcher, and pour over it, from the teakettle, as much clean boiling water as you wish to make into drink. Much depends on the water being actually in a boiling state. Cover the pitcher with a saucer or plate, and let the drink cool until it is quite cold; it is then fit to be used. The fresher it is made, the better, and of course, the more agreeable.

The above will be found a pleasant, light and highly diuretic drink. It is peculiarly grateful to the stomach, and excellent for carrying off the effects of excessive bile.

### THE VIRTUES OF SAGE.

THIS valuable herb was held in such high esteem among the ancients, that they have left us a Latin verse, which signifies, "Why should a man die whilst he has sage in his garden?" It is reckoned admirable as a cordial, and to sweeten and cleanse the blood. It is good in nervous cases, and is given in fevers, with a view to promote perspiration. With the addition of a little lemon juice, it is very grateful and cooling; some choose to take it dry, alleging that the surface of the leaves of green sage abounds with animalcules, which are very visible through a microscope; and so there are in many articles of common food; but we may be

assured, even if this is the case, that as they are nourished with the sage, they are of no harm, and, at all events, a little hot water will destroy them.—*Selected.*

**GRAVIES.**—Gravy may be made quite as good of the skirts of beef and the kidney, as of any other meat prepared in the same way. An ox kidney or milt, makes good gravy, cut all to pieces, and prepared as other meat; and so will the shank end of mutton that has been dressed, if much be not wanted. The shank bones of mutton are great improvements to the richness of gravy; but first soak them well, and scour them clean. Taragon gives the flavor of French cookery, and in high gravies, it is a great improvement; but it should be added only a short time before serving.—*Geo. Centinel.*

**TO BAKE APPLES.**—Take sour apples, those of a keen acid, and to every square tin filled with them, pour a teacupful of water and one of sugar. Bake them slowly until done. Eat them with cream and the juice which cooks from them. Nobody knows much of baking apples who has not eaten them in this way. No quince, peach, pear, nor plum preserves are equal to this simple dessert.

**TO TAKE OUT STAINS FROM WOOLLENS.**—If on woollen from grease, scrape a little French chalk on the spot. If of paint, rub in spirits of turpentine with a flannel. If of discoloration from any acid, the color may perhaps be restored by rubbing a solution of carbonate of soda or magnesia on the part. In this case, avoid the use of soap with the water, as the former will restore the red appearance.—*Anon.*

**TO TAKE MILDEW OUT OF LINEN.**—Take soap, and rub it well; then scrape some fine chalk, and rub that also into the linen; lay it on the grass; as it dries, wet it a little, and the mildew will come out at twice doing.

**TO PREVENT PERSPIRATION OF THE HANDS.**—Ladies who work lace or embroidery sometimes suffer inconvenience from the perspiration on their hands, which may be remedied by rubbing them frequently with a little dry wheat-en bran.

**CURRENT WINE.**—Add three pounds of sugar to one quart of juice, and three quarts of cold water, and put in a vessel loosely corked till all sound of fermentation ceases; then stop tight, and keep a year before bottling.



## AMERICAN IMPLEMENTS AT THE WORLD'S FAIR.

WE observe in a recent number of the *Gardeners' Chronicle*, (an English agricultural paper from which we made a large extract last month, to give the home view of the subject,) that our American plows at the exhibition are sneered at, "as apparently formed to root or grub up the soil rather than regularly turn it, with short beam, handles so short as to give but little leverage power over the implement, and it may be with no coulter to cut the slice clean from the unplowed land." The Belgian one-handed plow fares worse, "and the far more primitive and barbarous wedge of the Egyptians" forms the climax in the descending grade of our self-satisfied critics. All this is in happy contrast with "the English plow, which raises and turns the furrow gradually, and which, besides the long handles to give the holder more complete and accurate control over its movements, possesses beautiful, yet simple mechanism for adjusting coulter, draught," &c.

This praise of English plows is all right enough, and well merited by the English article; but we regret that Englishmen who attempt to write on this subject, have not a somewhat more comprehensive idea of what they are about, and sufficient liberality of soul to give utterance to a well-informed judgment.

We have seen many of what are considered the best models of English plows, and while conceding—willingly, not grudgingly conceding—all the advantages claimed for their fine adaptation to English work, we must be permitted, as Americans, to claim, that in all the essential requisites of plows, whether for lightness to the team, ease of labor to the plowman in guiding, completeness in each of the requirements of plowing, as of depth of furrow, thorough pulverisation of land, and entire overturning of the sod, and covering of all weeds and grass—in all these requisites the best American plows cannot be excelled by any other now in use; and they have this further advantage, that they are sold for half the price. And if this claim is denied, we challenge the objector to the proof by any fair trial on American soil.

Our plows have not the excessive length of some Scotch and English plow beams and handles, but they have length enough to subserve most effectually, every reasonable object required, while they are vastly less cumbersome and expensive. And they do have, moreover, what is here gratuitously and falsely denied to them—every essential additional fixture of coulter, wheel, and draft rod, whenever they can be made useful. As corroborative of these assertions, it may be sufficient to state that English colonists, in all parts of the world, are purchasers of American plows. To Nova Scotia, New Brunswick, both the Canadas, the Cape of Good Hope, the East Indies, Australia, and the West Indies, we export largely of this same translated American plow, though all the habits and prejudices of their inhabitants have been in favor of the home implement, and while there is a discriminating duty against us of 20 or 30 per cent.

We had two of the best Scotch plows in our warehouse for two or three years, and although their merits were fully set forth to Scotch, English, and Americans, who had travelled in Europe, they failed to find purchasers.

There are a few cheap plows at the London exhibition, it is true, designed for cotton cultivation, on the light, sandy lands of our southern states. They are without polish, high finish, or the addenda of a heavy plow, all of which are unnecessary for the purposes required; and, although made on the best principles and of the best materials, they come at prices that one English plow will buy a dozen. Americans, it is true, use a great many indifferent plows, and there is much need of a wholesome reform in this matter. But the plows sent to the exhibition are not of this class, and they are not only entirely adapted to the purposes sought, but they are not surpassed by any others ever made.

In connexion with this subject, we take the opportunity of noticing the unmanly and vulgar flings which some hireling of the *London Times*, at the instigation of its editors, is continually making at the American department of the exhibition. Here is the leading paper of England, a paper with a respectability and patronage so overwhelming, as to command a support that enables them to pay nearly half a million of dollars annually to government for stamps and advertising duties; yet it is almost daily guilty of the unparalleled meanness and vulgarity of aspersing a friendly nation, that has been invited by these libellers to send their contributions over 3,000 miles, to aid in making up a *World's Show*, and principally for England's benefit.

Americans have had scarcely any inducement to go into this exhibition. They do not go there to seek customers, as nearly every other exhibitor has done. Their motives in this little affair have rather been philanthropic than interested. Yet England can see—and does to her sorrow and deep apprehension, and hence this ill-timed abuse—in the comparatively few articles sent, that America has not been idle for the last 75 years, at which period it was the boasted policy of English statesmen, who then ruled what are now the United States, "that not even a hob nail should be manufactured in America." But we did not go to England to measure swords in her accumulated armories. We have before met them on the ocean with our merchantmen, our packet ships, our frigates, and more recently with our clippers and Collin's line of steamers and the world knows the result. And we have before met them, too, with our lightning rods and telegraphs, and steamboats, and cotton gins, and numerous other original inventions, that have already changed the current of trade, and may, ere long, affect the destiny of nations. We shall meet them again hereafter, and perhaps at *Phillipi*, with our manufactured articles and fabrics when the wail of mendicancy may take precedence of the jibes of insolence.

We had fondly hoped that the blackguardism of the leading influences in England towards this country had ceased; but some notable evidences to the contrary have recently convinced us of our error. She tyrannized

ised over us while she had the power, and she has insulted us continually since. We thought we should be treated with common courtesy in going to a World's Fair, on English ground, but the Times and its kindred echoes, has dispelled the weak illusion. The frequency and pungency of these articles, compels us to the painful conviction that this sneering hatred is grateful to the English taste. Would that Americans could show themselves men, and withdraw from a contact that is degrading. Let them cease to import from abroad what they can spare without inconvenience and loss, and we shall soon have the cringing of the *sycophant* for the taunts of the *bully*.

#### EXCURSION TO LAKELAND.

By invitation from Mr. Moses Maynard, President of the Long-Island Railroad Company, and Dr. E. F. Peck, whose praiseworthy and exclusive efforts have been directed for several years to the improvement of the wild lands along this road, we made an excursion on the 19th of June in company with several gentlemen of intelligence and experience, with the view of witnessing the progress of settling and cultivating this part of Long Island within the last five years. The day was unsurpassably fine, and every passenger seemed delighted with the rich and luxuriant fields of grain, and market gardens on either side of the railroad, as we glided through the counties of King's and Queen's.

On our arrival at Lakeland, after some two hour's ride, our party examined the buildings and cultivated grounds at this place, where there were seen growing in great luxuriance and promise, wheat, rye, garden vegetables, and fruits and flowers in great variety.

Lakeland, it will be remembered, is a new settlement in the very midst of the great wilderness of the island, some 50 miles from the city of New York, a region hitherto regarded by many as wholly unfit for cultivation; but the crops we examined at this place appeared equal to those on more favored parts of the island, and exhibited undeniable proof of the powers which these lands possess of producing good crops with a small outlay for amendments or manures.

We would suggest for the future guidance of Dr. Peck and other settlers on these lands, that accurate analyses be made of the soil and subsoil in order that they may know precisely in what amount of vegetable food these lands are deficient, so that they may know with certainty what manures or amendments it is necessary to apply to raise a given quantity of produce, and in order to know how to estimate, at the onset, the cost and the probable profits that will accrue.

The late Dr. Dwight, President of Yale College, and himself a keen and extensive observer of nature, an ingenious theorist, and thoroughly practical agriculturist, who travelled over this region in 1805, and visited the beautiful sheet of water, known by the Indian name of Ronkonkoma, which gives the name of Lakeland to this new agricultural site, says: "A great part of this island is still forested. Formerly four fifths of the county of

Suffolk were considered as barrens; that is, not literally, but tracts of poor land, left to nature, and regarded as incapable of useful cultivation. A considerable part of these tracts is now devoted to agriculture. Still, a great proportion of the county is a mere wood."

Great encroachments have been made upon this wild land since the days of Dr. Dwight, but there yet remains a few fields, whose proximity to our great metropolis, and natural capabilities for improvement, together with the remarkably low price at which they can be now purchased, will soon, we trust, commend them to our native farmers and intelligent immigrants.

Ronkonkoma Lake is of a circular form, about one mile in diameter, and some 80 or 100 feet deep. It is surrounded by a beautiful white gravelly beach, and is without any visible outlet. The water is pure and sweet, always refreshing and cool, and abounds in perch and a few other kinds of fish. In short, its character as a lake is *unique*.

#### IMPROVED COWS AND SUFFOLK PIGS.

On a recent visit to Mr. J. C. Jackson's beautiful place at Astoria, Long Island, we noticed some excellent shorthorn stock, and Suffolk pigs. The latter, Mr. J. imported direct from England; and certainly, without any disparagement to others, we must say that these are the finest pigs of the kind we ever saw. No picture can flatter them. They have only a little very fine silky hair upon them, and yet they are quite hardy and winter well. They will keep fat on grass alone. They are good breeders, excellent nurses, and make the most delicate pork and ham. The color is pure white. For a cross with common farm hogs, boars of this breed are invaluable.

At Mr. Sheafe's sale, last August, Mr. Jackson purchased the thorough-bred shorthorn heifer, Cream Pot 6th, and her bull calf, got by imported Exeter. The heifer gave over 18 quarts of milk per day for some time after calving, though only two and a half years old, and promises to be one of the greatest milkers in the country. We have no doubt she will give her 30 quarts per day, when six years old. The bull calf is growing up superbly, and shows that Exeter is a splendid stock getter. Mr. Jackson will show this calf against anything in the United States, of his age, for good size, high quality, and fineness of points.

In addition to the above, Mr. J. has three grade Durham cows, which have been averaging  $7\frac{1}{2}$  quarts of milk per day, making  $40\frac{1}{2}$  pounds of butter per week, the past season, which is quite as much as ten pretty good native cows have produced, which belong to one of his neighbors. Now, Mr. J.'s cows do not consume more food than five of his neighbor's cows do; and yet, for this food, he gets twice as much milk and butter. Can there be any doubt of the superior profitability of keeping first-rate cows? We think not. Mr. J.'s pastures, to be sure, are of the best kind, and so should those be of every farmer—poor pastures are as profitless as poor stock.

## Foreign Agricultural News.

By the steamer Asia, we are in receipt of our foreign journals to the 5th of July.

**MARKETS.**—Cotton was still lower. Provisions, Flour, and in fact most American products, the same.

**Stain for Wood Work of Stables.**—Stockholm tar, heated, and applied with a brush, is a good stain and preservative for stalls and mangers.

**Potato Disease.**—It is stated in the London Agricultural Gazette that the potato blight has made its appearance again in England.

**The World's Fair.**—The present year, 1851, brings forth the great exhibition, the World's Fair, to which millions are going, and where everything is expected to be seen, and the Royal Agricultural Society holds its annual show of live stock, in the Home Park, Windsor, to add to the attractions.

**Delightful Associations Connected with Gardening.**—Probably there is no feeling in the human mind stronger than the love of gardening. The prisoner would make a garden in his prison, and cultivate his solitary flower in the chink of a wall. The poor mechanic would string his scarlet bean from one side of his window to the other, and watch it and tend it with unceasing interest. A holy duty it is in foreign countries to decorate the graves of the dead with flowers, and here, too, the resting place of those who have passed away from us would soon be gardens; and from that old time when the Lord walked in the garden in the cool of the evening, down to the day when a poet laureate sang—

"Trust me, Clara Vere de Vere,  
From yon blue heaven above us bent,  
The gardener Adam and his wife,  
Smile at the claims of long descent,"

at all times, and in all ages, gardens were amongst the objects of the greatest interest with mankind.—*C. Dickens.*

**Farmyard Manures.**—Mr. Finnie, who lately opened a discussion before the Highland and Agricultural Society of Scotland, entered at great length into the best arrangement of a farm yard, the manure heap, and liquid-manure tank, best adapted for the collection and preservation of the shed and liquid manures. His principles, without entering into details, may be described as endeavoring as far as possible to collect the liquid separate from the solid excreta. The latter, he would interstratify with peat, where it can be had, or failing that, with soil or clay. Over the heap, he ladles the liquid manure, so as to allow as much as possible to be absorbed, and collect in the liquid-manure tank only that which cannot be obtained. Mr. Finnie, with full knowledge of the beneficial results obtained from the application of liquid manure, is of the opinion, that it will, generally speaking, be much more economical to apply manure in the solid than in the liquid state.—*Gardeners' Chronicle.*

**Australian Guano.**—Mr. Manning, of 251, High Holborn, transmitted to the council of the Royal Agricultural Society of England, a bag of guano received from Egg Island, one of the group lying off and about Shark's Bay, the most western point of New Holland, in south latitude 25°, and east longitude 118°. Mr. Manning stated that there were several other adjacent islands covered more or less with guano of a quality supposed to be, in some instances, superior to that on Egg Island. Rain, he said, scarcely ever fell on those islands, and in some places, the guano was found many feet deep. Mr. Manning concluded his statement by a detail of the steps that had been taken to bring about this first importation of Australian guano; and accompanied it by a hope that the council would consider the subject of sufficient importance to request Professor Way, the consulting chemist of the society, to make an official analysis and report on the value of the guano in question.

The following table by Professor Way shows the average composition of the ammoniacal guano of Peru, and the phosphatic guano of Saldanha Bay, as compared with that of the sample from Western Australia:—

	Peruvian.	Saldanha Bay.	Western Australia.
Moisture,.....	13.09	22.14	30.14
Animal matter and salts of ammonia,.....	52.61	14.90	14.75
Sand, &c.,.....	1.54	1.62	3.94
Earthy phosphates,.....	24.12	56.30	42.14
Alkaline salts,.....	8.64	5.04	0.03
	100.00	100.00	100.00
Ammonia furnished by 100 parts of each specimen,...	17.41	1.60	0.75

It is plain that this specimen of the guano from Western Australia, cannot be satisfactorily compared in respect to composition, with one supplying more ammonia; neither is it so rich in earthy phosphates as that of Saldanha Bay; and hence, is the poorest of all guanos offered in the market.

**Heat of Plants.**—All living bodies have a temperature peculiar to themselves; that is to say, they have a temperature different from, and independent of those that surround them. This temperature is intimately connected with their nature, and is modified according to the different conditions in which they may be. This necessary consequence of the successive changes which organic matter undergoes during life, is in its turn one of the causes which preserve organised bodies, and by which animal and vegetable life are protected from destruction or dissolution, which external circumstances would not be long in producing. It is this peculiar temperature which permits animals to inhabit regions of the globe that on account of their cold would be uninhabitable; which allows the development of aquatic vegetables in frozen water; which defends trees against winter, and which in tropical regions, causes vegetables to withstand a temperature often too high for their organisation.—*Hooker's Journal of Botany.*

## Editors' Table.

**PLEASE TO PAY YOUR POSTAGE.**—Under the new law we prepay postage on all letters addressed to our friends, and hope they will invariably do the same in return. Forty per cent on the amount of postage will be thus saved by both parties.

**ALDERNY BULL CALVES.**—For some very superior bull calves, bred from first-rate imported stock, see advertisement page 262.

**AGRICULTURAL SHOWS AND FAIRS.**—The secretaries or other officers of State and County Agricultural Shows and Fairs of all parts of the country are invited to send us by the 10th of the present month, the dates and places at which they are to hold their annual exhibitions, in order that they may be announced in our September number.

**SHORTHORN BULL CALVES.**—For advertisement of some superior calves of this breed, see page 261. They are the get of the superb imported bull Exeter, of the Princess tribe of shorthorns, and their dams are first-rate milkers, giving from 24 to 30 quarts per day. Their colors vary from strawberry roan to nearly deep red. We do not know of a better opportunity to purchase, for any one wishing to obtain a first-rate dairy stock bull of fine quality.

**FAIR AND SHOW OF THE NEW-YORK STATE AGRICULTURAL SOCIETY.**—This exhibition will be held at Rochester, on the 17th, 18th, and 19th of September. The grounds selected for the purpose are about a mile and a half from the centre of the city, and comprise 25 acres. The location is said to be well suited for the occasion, and unusual pains will be taken by the citizens to arrange and embellish the grounds. Among other objects of interest, the mechanics of Rochester propose to erect a wooden building, rendered fire-proof by a chemical process, to which they intend to apply fire at the close of the fair to test its incombustibility.

**PEACHES IN LOUISIANA.**—General Felix Huston is preparing to pour into New Orleans whole avalanches of peaches. He has 30,000 trees in East Feliciana, and it is stated that he is intending to plant 50,000 more, on high clayey land, of the choicest varieties, so as to have a succession of fruit from May till November. The New-Orleans Courier says: "Dr. Stone, in whose blunt sayings there are always deep thought and sound philosophy—yesterday declared that Huston's movement was worth a thousand quarantines for the health of New Orleans. 'No more scurvy,' said the Doctor. 'Eat stewed peaches, if you would keep off indigestion. Plenty of fruit for the people, and no yellow fever!'"

"The statistics of General Huston's plantation verify this remark. Before he bought it, great mortality prevailed there. One of its former owners lost fifty negroes. He whipped his negroes whenever they were caught eating a peach, a melon, or an apple. He plants 30 acres in melons. His negroes live in the peach orchard. He whips them unless they eat the best and choicest—and this they take care to do! There have

been but three deaths on the place—and these were old, obstinate negroes, *who would not eat peaches!*"

**RETURN OF A TRAVELLER.**—Dr. J. V. C. Smith, who held the office of Port Physician to the city of Boston for more than 20 years, has recently returned from an eighteen months' journey through various countries in Europe, Egypt, and the Holy Land. During that time, he has collected many valuable seeds, which he has very properly placed at the disposal of the Massachusetts Horticultural Society, besides an immense amount of useful information relative to the agriculture, arts, antiquities, and natural and social condition of the countries through which he passed. Among the other objects he had in view, he devoted a large share of his attention to the investigation of pulmonary diseases, for which he learned or discovered means of greatly mitigating or of effecting a final cure. We understand he is about to publish his journal, through the medium of which, his discoveries and researches will be made known.

**VERMONT STATE AGRICULTURAL SOCIETY.**—In pursuance of a call made by over 200 of the agriculturists and raisers of stock in this state, a public meeting was held at Middlebury, on the 16th of June, 1851, at which it was

*Resolved*, That a State Fair be held at Middlebury, on the 10th and 11th days of September next. The main object of the fair is to make an exhibition of our stock, our cattle, our horses, and our sheep. The public may be assured that the best specimens of Black Hawk colts, Morgan, Hamiltonian and Eclipse stock, and of French and Spanish Merino and other breeds of sheep; the best Durham, Ayrshire, Hereford and Devonshire cattle, including oxen, cows, and young Cattle. The following officers were chosen:—

*President*, Fredrick Holbrook.

*Vice Presidents*, William Nash, George Chipman, Paris Fletcher, E. D. Barber, G. A. Austin, F. E. Woodbridge, Addison county; Charles Paine, John Gregory, Roderick Richardson, Washington county; John Wheeler, L. G. Brigham, Ezra Meech Jr., Chittenden county; J. K. Hyde, Jesse Hines, Rutland county; John S. Pettibone Bennington county; Epaphro Seymour, George Campbell, Windham county; P. B. Southgate, Ebenezer Bridges, Windsor county; J. P. Kidder, J. Thomas, Orange county; A. M. Clark, John S. Foster, Franklin county; Henry M. Bates, Orleans county; Nathan Smilie, Stillman Churchill, Lamoille county; John Dewey, Essex county; Samuel Adams, Grand-Isle county; E. Fairbanks, Caledonia county.

*Secretary*, E. R. Wright.

*Marshals*, Abraham Foot, D. S. Church, W. S. Johnson.

*Committee of Arrangements*, Merrill Bingham, Edwin Hammond, Alonzo L. Bingham, David Hill, Seth Langdon, William Phelps Nash, Lyman P. White, Joseph Warner, S. W. Jewett.

Committee to invite an orator for the occasion, S. W. Jewett.



## NEW-YORK CATTLE MARKET.

*Sheep and Lambs.*—Sales of Sheep at from \$2 to \$4.75. Lambs at from \$1.50 to \$4.25. All sold.

**TO CORRESPONDENTS.**—Communications have been received from T. L. Pitt, W., E. H. Brown, J. H., Ira Allen, J. W. Pillsbury, T. S. W. Mott, R. Linsley, L. T. Talbott, Wm. H. Sotham, Commodore Jones, and John Bonner.

*Seed Rye* of the best winter variety ; also, a cheaper kind, suitable for late fall and early spring pastures.

au A. B. ALLEN & CO., 189 and 191 Water st., N. Y.

**S**HORTHORN BULL CALVES.—For sale, two very superior thorough-bred shorthorn bull calves, got by the superb imported bull Exeter, out of two of Mr. J. F. Sheafe's great milking cows. Exeter is of the Princess tribe of shorthorns, and was bred by Mr. Stephenson, of Durham, England, and imported by Mr. Sheafe. The dams of these bull calves are celebrated milkers. For a particular account of Exeter and these cows, see the last volume of the Agriculturist, and page 151 of the present volume. Mr. Jackson, of Astoria, has a young bull, bred last season by Exeter, out of one of Mr. Sheafe's cows, whose superior we do not believe was ever produced in the United States; and these calves now advertised for sale, we think equally promising.

au **A. B. ALLEN & Co., 189 and 191 Water st., N. Y.**

**VALUABLE FARM FOR SALE.** In the town of Conchin, Broome county, state of New York, containing 300 acres, with a large brick house, barn, hay houses, carriage houses, wood house, and all other necessary buildings, elegantly situated, fronting the New-York and Erie Railroad and Cohocton Turnpike, and Susquehanna River, three miles from the Great Bend Depot, two miles from Kirkwood Depot, and 5½ miles from Binghamton. The soil is rich and fertile, and the grain land. An orchard with grafted fruit, well watered, and is one of the best farms in the town of Conchin. For further particulars apply to  
JOSEPH CONCHIN, near the premises, or:

au EDWARD WAIT, Montgomery Co., N. Y., or MILTON McEWEN, Warwick, Orange Co., N. Y.

**A IMPROVED FARM FOR SALE.**—This farm lies in the town of Rochester, Ulster County, New York. A drive of two hours connects it with the Hudson River, at Roundout. The Delaware and Hudson Canal passes through the premises, thus affording a better market for farm produce at the door than can be obtained in the city of New York. The house and outbuildings have been thoroughly repaired during the past year, which, together with the farm, are now in excellent condition. The premises are well watered, and contains thereon an excellent apple orchard of 100 trees, of 10 years' growth. Extensive beds of limestone abound in the immediate vicinity, from which good lime is manufactured, and sold at from three to five cents per bushel. There is also affording facilities for the manufacture of lime. The extensive flour and plaster mills are located at the High Falls, three miles distant from the premises. In connection with the above, a wood lot of 100 acres will be sold at a reduced price. Price of improved farm, \$4,800. Terms.—One third of the purchase money upon the execution of the deed—the balance can remain on bond or mortgage for five years.

ASA SNYDER, Rochester, Ulster Co., N. Y.

**DRAIN TILES.**—The Staten-Island Drainage Tile Company are now prepared to supply agriculturists with the above-named tiles of the most approved patterns.

2-inch round pipes, one foot in length, per thousand,	\$ 9
2½ Do.	Do. 10
3 Do.	Do. 12

and pipe and horse-shoe tiles of all sizes, at corresponding prices. The establishment is at Latourette's Point, Fresh Hills, near Richmond, Staten Island, and boats drawing four feet of water can enter the yard, and load from the kilns. Address  
A. B. ALLEN & Co. 189 and 191 Water st. N. Y.

**A. G. BAGLEY & Co.,** manufacturers of gold pens, gold and silver pen and pencil cases, ivory and tortoise-shell holders, and patentees of the celebrated extension cases, No. 129 Broadway, New York. ju tf

**TWO BREEDERS OF CHOICE STOCK.**—Situation wanted as farm superintendent, by a single young man, well qualified to superintend not only the out-door arrangement, particularly with reference to the breeding and management of choice stock, but also the keeping the books, accounts, &c., connected therewith. For further information, address L. G. Morris, of Fordham, Westchester Co., N. Y., who will furnish satisfactory recommendations.

**THE AMERICAN MUCK BOOK** (in press,  
treating of all the Nature, Properties, Sources, History, and  
Operations of all the Principal Fertilisers and Manures in Com-  
mon Use, with Specific Directions for their Preservation and  
Application to the Soil and to Crops; drawn from Authentic  
Sources, Actual Experience, and Personal Observations, as com-  
bined with the Leading Principles of Practical and Scientific  
Agriculture. By D. J. Browne. Price \$1.  
au C. M. SAXTON, Agricultural Book Publisher,

**EAGLE PLOW.—No. 28.**—The following extract from the letter of a gentleman who purchased one of these plows, fully explains its character. "In answer to your inquiry how I like the great breaking plow, I have to say it entirely exceeds my expectations, and even your own recommendation, which I then thought quite extravagant. I put on four stout yoke of oxen, and drove into the thickest patch of scrub oak roots upon my farm; not without some misgivings, that I should have to drive down the road, and back again, and then turn over twenty acres as completely as though it had been nothing but stubble, and the plow is this day better than it was when it came from your store. I think it the cheapest and best plow for such heavy work ever invented."

These plows are for sale at our Agricultural Warehouse, No's. 189 and 191 Water st., New York. Price, plain, \$18—full rigged, with wheel, draft rod, and cutter, \$20.

A. B. ALLEN & Co.

**GREENHOUSE PLANTS, VINES AND** Roses. Parsons & Co. offer for sale every desirable variety of Greenhouse Plants, and many valuable novelties recently introduced from Europe. Attention is particularly directed to their fine stock of Camellia wilderii, the perfection of whose form is not attained by any other variety. The original stock, both of this and C. Abbey Wilder, is in their possession.

Growers of Grapes are invited to examine their Vineries, now in full fruit, and from which they can furnish good vines of about forty varieties, at

50 cents for those one year old.

75 " " two years old.

.00 " " of extra size.

Their stock of saleable roses includes some thousands on their own roots of the Remoutant, Bourbon, China and Garden Roses, in their various sub-classes. Catalogues furnished gratis on application to Flushing, near N. Y. PARSONS & Co.

**COMMERCIAL GARDEN AND NURSERY**  
of Parsons & Co., Flushing, near New York. The proprietors of this establishment offer for sale their usual assortment of Fruit and Ornamental Trees, Shrubs, Vines, Roses, &c. Theirs are the best of Apples, Peaches, &c. raised in the State, and are offered. Also, Pears on Quinces, of their own growing. Their Ornamental Garden contains the usual well-known varieties, and all the best new Trees and Shrubs for Lawns and Arboreta, including the new Pines, *Arancaria imbricata*, and *Cryptomeria japonica*, and the *Campana*, at one to two dollars each. They also declare of various kinds of bulbs for sale. Catalogues furnished gratis on application by mail.

**ENDLESS-CHAIN PUMPS, OR WATER**  
Elevators.—These highly approved machines operate upon the same principle as those used for grain. The elevator is made a part of an endless chain, that works over an iron wheel, and the material to be raised is taken into a hopper at the top, through which a constant stream is made to flow into the pail, by simply turning the crank, attached to the wheel at the top, which any light hand can do with great ease. They are made of several sizes, and can be fitted up for any depth well, or cistern required, and are well adapted for raising water from any source. They are the most efficient machine ever used for emptying the vaults of mines, where the contents are in a semi-liquid state.

A. B. ALLEN & Co., 180 and 191 Water st., N. Y.

**GARDEN AND FIELD SEEDS FOR 1851.** We are getting in, not only our usual supply, but a larger stock than ever, of all kinds of seeds required, either for field or garden culture, fresh and free from noxious weeds, &c., which are offered at wholesale or retail. Orders for trees and shrubbery executed as usual.

by A. B. ALLEN & CO., 189 and 191 Water st. N. Y.

**L**IGHTNING RODS, constructed on scientific principles, and if properly put up, will render churches and other buildings secure from the electric shock.

A. B. ALLEN & Co., 189 and 191 Water st.

**HIGHLY IMPROVED ESTATES AND VALUABLE TIMBERED LAND ON LOWER JAMES RIVER FOR SALE.**—The undersigned, prevented by engagements, requiring his undivided attention elsewhere, from residing on his estate, will sell, on the premises, publicly, at 11 o'clock, A. M., on Tuesday, the 23d day of September next, without regard to weather, that large and valuable body of highly improved arable and heavily timbered land, extending up the north side of James River, from the Chickahominy, a distance of more than five miles, in the county of Charles City, Virginia, well known under the general designation of "Sandy Point."

This estate lies 33 miles below Petersburg, 45 miles below Richmond, and about 65 miles above Norfolk, in what is justly considered the finest and most extensive grain-growing region of Virginia, and as healthy as any on our rivers. Spring and well water abundant and excellent. The number of acres is upwards of 4,000, of unsurpassed natural quality, of which more than 2,000 acres have been thrice limed, and are now in a high and successful state of cultivation, upon the five-field rotation; and more than 1,000 acres well set in clover. The balance, chiefly in wood and timber, embracing some of the best timbered land in Eastern Virginia, convenient to good navigation. Marl abounds on the river, and stone lime is supplied at 61 cents per bushel.

The division will be nearly as follows, of which surveys and maps will be exhibited:—

[No. 1.] "UPPER QUARTER," 841 acres, 560 improved, 281 principally in wood and timber. Buildings—a small frame dwelling, kitchen and laundry, smoke house, negro houses, &c. Barn with sheds and stationary horse power and shelters.

[No. 2.] "UPPER TEDDINGTON," The family residence, 797 acres, 540 improved, 257 principally in wood and timber. Buildings—a commodious wooden dwelling, large two-storied kitchen and laundry, ice house, new and commodious stable and carriage house, storehouse, shops, servants' houses, and every other convenient outhouse usually on such farms. Also, a new barn, part wood and part brick, with four floors, 80 by 38 feet, and a wing 30 by 50, for bone, plaster, saw and grist mill. In the barn are two new 36-inch drums, revolving rakes, fans, sieves, and every other appurtenance for threshing and winnowing wheat, shelling and fanning corn, grinding, and sawing; all efficiently driven by a 16-horse power stationary engine, in complete order and condition. The orchards are large and stocked with fruit of every variety, of the finest quality.

[No. 3.] "LOWER TEDDINGTON," 716 acres, 564 improved, 152 principally in wood and timber. Buildings—a new framed dwelling, with 4 rooms and a passage, negro houses, a large and well-arranged barn, with stationary horse power and shelter, two large stables for horses and oxen, extensive hay house, and well-constructed buildings for the protection of wagons, carts, implements, &c.

[No. 4.] "NECK," 707 acres, 537 improved, 171 principally in wood and timber, exclusive of more than 120 acres of meadow or marl land, well located, and reclaimable at small expense.

A valuable winter fishery belongs to this farm. Buildings—a small new frame dwelling, smoke house, negro houses, stable, and large barn, with stationary horse power and shelter.

Each division has a good landing, at which wharves can be erected cheaply and conveniently. To Upper Teddington, within 100 feet of the barn, belongs a new commodious and substantial wharf, adapted to any sized vessel. Steamers pass twice a-day, and sometimes oftener, from Richmond, Petersburg, Norfolk, Baltimore, and Philadelphia.

[No. 5.] 1,300 acres of timbered land, considered the most valuable in this part of Virginia, lying on and near navigation, which will be divided in parcels of 100 acres or more.

Also, all my stock of every description, consisting of 164 head of superior improved cattle, of the Devon, Durham, and Ayrshire crosses. Among them, one fine full-blooded, and one half-blood Ayrshire bull; 210 sheep of the stock of Mr. Reynold, of Delaware; hogs; 39 mules and 3 horses—together with a large and valuable collection of implements of every variety, &c., &c.

Before the day of sale, more than 425 acres of the clover will be fallowed, and purchasers will have time and the privilege of extending the preparation for seeding to suit themselves.

Full possession of the farms given on the 1st of January next; of the timbered lands immediately.

Mr. Nichol, residing at Sandy Point, is prepared to show the property in my absence, and a particular examination is invited before the sale.

A portion of the slaves, in families only, will be sold to the purchasers of the farms, if desired.

**TERMS.**—For the farms, one fifth cash, the balance in five equal instalments, with interest payable annually upon all the instalments. For the timber land, one fourth cash, the balance in three equal annual instalments, interest payable annually as above. For the perishable property, a credit of 12 months upon all sums over \$100. Approved personal security upon all credit payments and deeds upon the lands, additional.

Letters of inquiry, addressed to Petersburg, Va., will be promptly answered. at St ROBERT B. BOLLING.

**ALDERBURY BULL CALVES.**—Two very fine Alderbury bull calves for sale, of the late importation by Mr. Taintor. These are from imported cows that have taken first premiums, and were considered equal to any in the island of Jersey. at A. B. ALLEN & CO., 189 and 191 Water st.

**LANDS ON LONG ISLAND.** adjoining the villages of Lakeland and Hermantville, about 48 miles from the cities of New York and Brooklyn, by the Long-Island Railroad. The opportunity is now offered to all those who ever wish to obtain land on Long Island, the ancient "Garden of America," that will probably never occur again; for these lands are the only remaining new lands on the island, and are equal in quality, when cultivated, to any other land.

The results of cultivation on these island lands have been so great, so much beyond the expectations of any one, that they are now considered of great value for farms and gardens, and will, in all probability, be all taken up for settlement and occupation, or be held at more than five times their present price. All kinds of produce may now be seen growing there, such as wheat, rye, corn, potatoes, and garden vegetables, with fruits and flowers, in the most luxuriant growth, where but a short time since, the land was covered with trees and bushes.

The surface of the ground is perfectly beautiful, free from stone, bogs, or marshes, and the climate as healthy as can be found in this latitude. The soil is a fine loam, admirably adapted to high cultivation and great crops, and of easy tillage.

Indeed, no New-England nor northern New-York man can form any adequate idea of the difference in the labor and strength requisite to cultivate these island lands, and that required to subdue their own rugged lands, until he has seen or made the trial; and I now offer for sale as handsome land, and intrinsically as valuable, as can be found within 50 miles of the city of New York, in any direction, in lots of five acres or more, for the sum of \$25 per acre.

Any person wishing to purchase a five-acre lot of good and handsome land, without one foot of water or useless ground on it, can do so by sending \$10 as a first payment, and a further sum of \$10 a month until half is paid, when a warranty deed and good title will be given, and the remainder part of the purchase money may be paid or secured on the land, to be paid within three or five years, with 6 per cent. yearly interest. Larger lots will be sold on the same terms.

The title is perfectly good. I have a history or deduction of the title complete, certified to by legal men of the highest character, which I will send by mail, with maps, pamphlets, and all information to all purchasers, or those who wish to be informed of these island lands, by applying to

at CHARLES WOOD, Stationer, 117 John st., N. Y.

**PATENT ZINC PAINTS.**—The Zinc White Paint is rapidly superseding white lead, over which it possesses many advantages. It is whiter and more beautiful than white lead—does not turn yellow, even when exposed to sulphurous vapor, has no smell, is not injurious to health, and is really cheaper, as it covers more surface and is more durable. This superior zinc paint is kept constantly on hand, both dry and ground in oil.

ZINC BROWN and BLACK PAINTS are both weather and fire proof—the best covering for outside work ever introduced; adapted to buildings of wood, brick, or stone; fences, carriage bodies, bridges, and machinery; the hulls of vessels, anchors, chains, and all other iron work on board ship; Steam boilers, smoke stacks, and water tanks; iron, tin, and other roofing, iron, shutters, doors, and railings, wire fences, &c. For iron surfaces, this paint is especially valuable, as it forms a galvanic connection, and entirely prevents rust. May be had both dry and ground in oil.

In preparing these paints for use, when dry, they should not only be slightly mingled with oil, but thoroughly worked in with as little of it as may be necessary to give the proper fluidity, when they will cover well and give entire satisfaction. When ground in oil, they are treated in all respects like white lead.

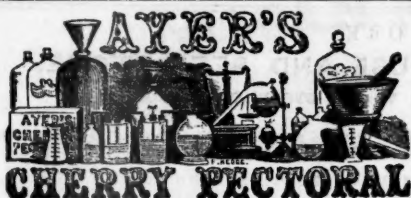
Dealers supplied by S. T. Jones & Co., general agents for the New-Jersey Exploring and Mining Co.'s Patent Zinc Paints, No. 53 Beaver street, New York. Ju 6m

#### VALUABLE REAL ESTATE FOR SALE.

I offer for sale my entire real estate, upon which are 35 sets of boxes; the most of which have only been in use from one to two years; with a sufficient quantity of round trees to cut at least 20 sets more; the land upon which these are situated, is not easily surpassed by any piney lands in Eastern Carolina. There is upon the premises two distilleries neatly and conveniently fitted up, with all necessary outhouses. Upon the farm, I think the buildings altogether are seldom excelled. Those wishing to purchase are invited to examine for themselves. Terms shall be low, and payments accommodating. Come and see. Any person wishing to purchase can be furnished with a sufficient number of teams and wagons to carry on both the operations of farm and turpentine, and with a year's supply of provisions.

mar 11. JOHN A. AVIRETT, Catharine Lake, Onslow Co., N. C.

**A FARMER WANTED.**—A man capable to manage a small farm, garden, and orchard, in a healthy mountain region of North Carolina, who has a wife, able and willing to take charge of milk and butter making upon a small scale, may address M. R. Singleton, Flat Rock, North Carolina. The applicant must be American, or long resident in this country. Particulars given when desired. au 31



**AYER'S  
CHERRY PECTORAL**  
For the Cure of  
**COUGHS, COLDS, HOARSENESS, BRONCHITIS, CROUP, ASTHMA, WHOOPING COUGH AND CONSUMPTION.**

In offering to the community this justly-celebrated remedy for diseases of the throat and lungs, it is not our wish to trifle with the lives or health of the afflicted, but frankly lay before them the opinions of distinguished men, and some of the evidences of its success, from which they can judge for themselves. We sincerely pledge ourselves to make no wild assertions or false statements of its efficacy, nor will we hold out any hope to suffering humanity which facts will not warrant.

Many proofs are here given, and we solicit an inquiry from the public into all we publish, feeling assured they will find them perfectly reliable, and the medicine worthy of their best confidence and patronage.

From the distinguished Professor of Chemistry and Materia Medica, Bowdoin College.—Dear Sir: I delayed answering the receipt of your preparation, until I had an opportunity of witnessing its effects in my own family, or in the families of my friends. This I have now done with a high degree of satisfaction, in cases both of adults and children. I have found it, as its ingredients show, a powerful remedy for colds, coughs, and pulmonary diseases.

PARKER CLEVELAND, M. D.

From an Overseer in the Hamilton Mills, in this City.—Dr. J. C. Ayer: I have been cured of the worst cough I ever had in my life, by your "Cherry Pectoral," and never fail, when I have opportunity, of recommending it to others.

Read the following, and see if this medicine is worth a trial. This patient had become very feeble, and the effect of the medicine was unmistakably distinct:—

United States Hotel, Saratoga Springs, July 5th, 1849.  
Dr. J. C. Ayer—Sir: I have been afflicted with a painful affection of the lungs, and all the symptoms of settled consumption, for more than a year. I could find no medicine that would reach my case, until I commenced use of your "Cherry Pectoral," which gave me gradual relief, and I have been steadily gaining my strength till my health is well nigh restored.

While using your medicine, I had the gratification of curing with it, my reverend friend, Mr. Truman, of Sumpter District, who had been suspended from his pastoral duties by a severe attack of bronchitis. I have pleasure in certifying these facts to you, and am, sir,

Yours respectfully,

J. F. CALHOUN, of South Carolina.

Prepared and sold by James C. Ayer, practical chemist, Lowell, Mass., and sold by druggists generally.

**IMPORTED DEVON BULL FOR SALE.**

We intend offering for sale at the auction held on the closing day of the New-York State Agricultural Society's Show, at Rochester, in September next, if not previously disposed of, our thorough-bred imported Devon bull Meganticook, which took the first prize at the show of the American Institute last autumn. Meganticook was five years old in April last; was bred by Mr. Baker, of Devonshire, England. He was got by Prince Albert out of a cow sired by Silfiant, and was purchased by Mr. George Turner, of Barton, near Exeter, England, in the spring of 1843, who used him one season, and sent him to us in the autumn of that year. Prince Albert took the first prize at the Royal Agricultural Society's Show, held at Southampton, and was sold to the French government for 120 guineas. Silfiant was one of Mr. James Quirry's favorable bulls, and was sold for 100 guineas.

W. P. & C. S. WAINWRIGHT,

Rhinebeck, Dutchess Co., N. Y.

**NEW-OXFORDSHIRE BUCKS FOR SALE.**

The subscriber has a number of yearlings and two-year-old bucks which he will sell any time when called for, and has no hesitation in saying this breed of sheep is superior to all others for large carcasses, heavy fleeces, early maturity, and constitution, and defies competition with all other breeds for profit. This flock, (which has been bred from some of the best ever imported,) is so well known they need no further description than to say that the sire clipped 18 pounds of washed wool, and weighed 361 pounds alive. Gentlemen are invited to call and see for themselves, or communicate by mail. Direct to

CLAYTON B. REYBOLD, Delaware City, Del.

**THE NEW-ENGLAND**

**Live-Stock Insurance Company,**

New Haven Conn..

**CAPITAL \$50,000,**

With power to increase to \$100,000.

Insures horses, cattle, &c., against loss from death, either from natural causes, or accident, or from disease of any description.

THOMAS KENDRICK, President.

T. REYNOLDS, Secretary.

Now-York agency, corner of Wall and Hanover streets, Merchants' Exchange.

Jul 17

**SHORTHORN BULLS FOR SALE.**—The subscriber offers for sale the following shorthorn bulls. They are of the Princess tribe bulls; and their equals cannot be shown in America:—

EARL OF SEAHAM, (10,181),

Deep Roan; calved April 21st, 1848; bred by John Stephenson, Esq., Wolviston, county of Durham, England; imported 1850, by A. Stevens and J. M. Sherwood; got by Earl of Antrim (10,174); dam, Primrose, by Napier (6,238); grandam, Rose Ann, by Bellerophon (3,119); great grandam, Rosette, by Belvedere (1,706); gr. gr. grandam, Red Rose, by Waterloo (2,816); gr. gr. gr. grandam, Moss Rose, by Baron (58); gr. gr. gr. gr. grandam, Angelina, (bred by Sir Henry Vane Tempest), by Phenomenon (491); gr. gr. gr. gr. gr. grandam, Anna Boylens, by Favorite (252); gr. gr. gr. gr. gr. gr. grandam, Princess, (bred by Robert Collings), by Favorite (252); gr. gr. gr. gr. gr. gr. gr. grandam, Brighteyes, by Favorite (252); gr. gr. gr. gr. gr. gr. gr. gr. grandam, Brighteyes, (bred by Alexander Hall), by Hubback (319); gr. gr. gr. gr. gr. gr. gr. gr. gr. grandam, Brighteyes, by Snowdon's Bull (612); gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. grandam, Beauty, (bred by Thomas Hall), by Masterman's Bull (422); gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. grandam, Duchess of Atholl, by Harrison's Bull (292); gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. grandam, Tripes, (bred by C. Pickering), by Studley Bull (626); gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. gr. grandam, bred by Mr. Stephenson, of Kettion, in 1739. See 9th vol. Herd Book, pages 65 and 526). Earl of Seaham won the first prize for two-year-old shorthorn bulls at the New-York State Agricultural Show, 1850; and first prize for aged bulls, or those two years and above, of the American Institute of New York, in October, 1850.

**A BULL CALF.**

Red, with a very little white; calved January 23d, 1851; got by imported 3d Duke of Cambridge (5,941); dam imported Princess III., (bred by Mr. Stephenson), by Napier (6,238); grandam, Rose Ann, by Bellerophon (3,119), as in Seaham's pedigree; Rosette, by Belvedere (1,706); Red Rose, by Waterloo (2,816); Moss Rose, by Baron (58); Angelina, by Phenomenon (491); Anna Boylens, by Favorite (252); Princess, by Favorite (252); Brighteyes, by Favorite (252); Brighteyes, by Hubback (319); Brighteyes, by Snowdon's Bull (612); Beauty, by Masterman's Bull (422); Duchess of Atholl, by Harrison's Bull (292); Tripes, by the Studley Bull (626), out of a Cow bred by Mr. Stephenson, of Kettion, in 1739. (See Herd Book, vol. 9th, page 530, under head Rose Ann).

They are now on the subscribers farm at Auburn. He invites breeders and purchasers to see them. He can assure those who have not seen Seaham, that the portrait of him in this number of this paper, at least, is no better in any respect than he is, either in substance or style.

The above bull calf is an extraordinary one, of fine style; rich red color, with little white.

These two Bulls are of the superior Princess tribe of shorthorns, the best for milk, quality, and style, in England or America.

Purchasers desiring superior animals, can meet their wishes here; and, if they wish the Princess tribe blood, can get it nowhere except of the subscriber and Mr. Stevens, who alone, in the United States, have any quantity of that tribe, and they have none but those for sale. A. B. Allen, 189 Water street, New York, will give information as to prices.

J. M. SHERWOOD,

Auburn, Cayuga Co., New York.

**FRUIT AND ORNAMENTAL TREES FOR SALE.**

—50,000 Peach trees of one and two years growth, from the bud; 40,000 Apples; 5,000 Dwarf Pears, each containing all the most esteemed varieties, and of large size. Also Quinces, Plums, Nectarines, Apricots, Almonds, Grapes, Raspberries, Gooseberries, Currants, Strawberries, &c., &c. 50,000 Silver and Ash-leaved Maple Seedlings of one year's growth; 50,000 Apple Seedlings. The above will be sold on the most reasonable terms. Persons residing at the south and west should send their orders early, so that the trees may be forwarded by the last of October or first of November. Catalogues with prices annexed will be sent to all applicants.

au 34

ISAAC PULLEN,  
Hightstown, Mercer Co., New Jersey.



NEW-YORK

AGRICULTURAL WAREHOUSE AND SEED STORE,

A. B. ALLEN & CO. 189 AND 191 WATER STREET, NEW YORK.

THE SUBSCRIBERS keep constantly on hand, and offer for sale the largest and most complete assortment of Agricultural and Horticultural Implements and Field and Garden Seeds in the United States, among which may be found the following:—

**MILK PANS.**—Glass and Enamelled Iron Milk Pans, very desirable articles.

**CHURNS.**—Thermometer, Atmospheric, Kendall's, and other kinds.

**HAND CULTIVATORS** and Hand Plows are very useful implements in garden culture.

**BATCHELDER'S CORN PLANTER**, a very desirable and efficient machine. Price \$14.

**SCYTHES.**—Grass, Grain, Bush, and Lawn Scythes of the best kinds.

**RAKES.**—A large assortment Steel, Iron, and Wooden-headed Garden Rakes, and Lawn and Hay Rakes.

**HORSE HAY RAKES.**—We shall soon be supplied with new and highly-improved patterns.

**REAPING AND MOWING MACHINES.**—These have been fully tested, and embrace many late improvements, and we can highly recommend them.

**MANURE FORKS, SHOVELS, SPADES.**—Our assortment we intend shall be unequalled either for variety or superior quality.

**GRAIN DRILLS**, a machine which every large grain planter should possess. We have them of the best patterns, embracing most valuable improvements.

**GARDEN AND FIELD ROLLERS**, made of any desired number of iron sections, one foot in width, and 20 and 28 inches diameter, for either hand or horse, very superior and exceedingly useful implements.

**POTATO OR SMALL DOUBLE-MOLD** Plow, the best implement made for hilling or digging potatoes, throwing them perfectly out of the hill. By extra molds, which can be attached, it makes a superior double mold-board plow. Price \$6.50 to \$8.

**SEED SOWERS**, to be worked either by horse or hand, of various styles. They plant seeds of all sizes at any required distance, opening the drills and covering the seed at one operation, and work admirably. Price of most approved, \$14.

**GARDEN AND FIRE ENGINES**, very useful machines, arranged on wheels, for watering gardens or walks, and afford protection from fire. They will throw a strong stream 40 feet high, are easily worked and not liable to get out of order. Also, small Garden Pumps and Syringes of various styles.

**HARROWS.**—The most approved is Gedde's Double Triangular-Folding Harrow, which readily adapts itself to any unevenness of the soil, and with the same labor does the work better, and more thoroughly, than any other kind. Also, the common Square Harrow, and Double-Square or Scotch Harrow, which can be used either as a one or two-horse harrow. Also various other kinds.

**CULTIVATORS.**—Rodgers' Self-Sharpening Steel-Toothed is among the best; also a great variety of wrought and cast-tooth cultivators, both with and without wheels. The Universal Cultivator has an iron frame, arranged for different kinds of teeth among which are two molds, that, by transferring from one side to the other, the earth may be thrown either to or from the plants, as may be desired. All the different styles are made to expand or contract, to conform to the width of the rows.

**PLOWS**, of a great variety of styles, sizes, and patterns, made in the most durable manner, and with the latest improvements, suited to all kinds of soils, crops, and modes of cultivation, embracing the celebrated Eagle, Miner & Horton, and Steel-Pointed, Self-Sharpening Plows; Lock-Coulter Plows, expressly for breaking up and working new land; Side-Hill, Sub-Soil, Double-Mold and Three-Furrow Plows. Also, a large variety of the most approved Southern plows, particularly adapted to cotton, sugar and rice cultivation.

**TIMOTHY SEED**, fresh reaped, a choice article.

**POUDRETTE**, a good article at manufacturers' prices.

**MATTOCKS**, Pick, Grubbing hoes adapted to all kinds of work.

**GRINDSTONES** of superior grit and quality, hung on improved friction rollers, to work either by foot or hand.

**SMUT MACHINES**, Pilkington's, the most approved for general use. Price \$60.

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**GUANO.**—A full supply of genuine Peruvian and Patagonian Guano.

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**GROUND PLASTER, OR GYPSUM**, a pure article, put up in barrels, at low prices.

**WATER RAMS**, Suction, Force, and Endless-Chain Pumps; Leather, Gutta-Percha, India-Rubber Hose, Lead Pipe, &c.

**HAY AND COTTON PRESSES.**—Bullock's Progressive Power Presses, combining improvements which make them by far the best in use.

**HORTICULTURAL TOOLS**, a most complete assortment, consisting of Pruning Saws and Chisels, Pruning and Budding Knives, Pruning, Garden, Hedge, Flower and Vine Shears and Scissors, Garden Trowels, Forks, Hooks, &c.

**HORTICULTURAL TOOL CHEST**, containing a good assortment of implements, most of which screw to the same handle, a very handy and convenient article.

**GRAIN MILLS**, Corn and Cob Crushers, Fanning Mills, Corn Shellers, and Straw Cutters, a very large assortment of the best and latest improved kinds.

**FIELD AND GARDEN SEEDS** of every variety required in the United States, fresh, and of the choicest quality.

**FOREIGN SEEDS**, of superior quality and late importation.

**GRASS SEEDS.**—Ray Grass, Lucern, and White Dutch Clover.

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**TOBACCO, OIL AND SEED PRESSES**, made on progressive principles, to take the place of the hydraulic press. These are much more efficient than the latter, at the same time they are more economical. Their superior merits have been recently satisfactorily tested by several large oil manufacturers in this vicinity, where the machines may be seen in operation.

**MACHINE SHOP AND FOUNDRY.**—Connected with our Agricultural Warehouse and Seed Store, we have a large Machine Shop, with Steam Power and Foundry, where any implement and Machine can be made to order, which is required for the Farm, Plantation, Garden, &c.

**HORSE POWERS** of all kinds, guaranteed the best in the United States. These embrace,

- 1st. The Chain Power, of our own manufacture, both single and double-gear, for one and two horses, which has never been equalled for lightness in running, strength, durability and economy. They are universally approved wherever they have been tried.
- 2d. The Bogardus Power, for one to four horses. These are compact and wholly of iron, and adapted to all kinds of work.
- 3d. Eddy's Circular Wrought-Iron Power, large cog wheels, one to six horses, a new and favorite power.
- 4th. Trimble's Iron-Sweep Power, for one to four horses.
- 5th. Warren's Iron-Sweep Power, for one or two horses.

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